

342-3PCT.ST25.txt
SEQUENCE LISTING

<110> Sahin Dr., Ugur
Türeci Dr., Özlem
Koslowski Dr., Michael

<120> Genetic Products Differentially Expressed in Tumors and Use Thereof

<130> 342-3PCT

<160> 100

<170> PatentIn version 3.1

<210> 1

<211> 1171

<212> DNA

<213> Homo sapiens

<400> 1
ctgtcgttgg tgtatttttc tgggtgcact tctgtgcctt ccttcaaagg ttctccaaat 60
gtcaactgtc aaggagcagc taattgagaa gctaattgag gatgatgaaa actcccagtg 120
taaaattact attgttgga ctggtgccgt aggcattggc tgtgctatta gtatcttact 180
gaaggatttg gctgatgaac ttgcccttgt tgatgttgca ttggacaaac tgaagggaga 240
aatgatggat cttcagcatg gcagtctttt ctttagtact tcaaagatta cttctggaaa 300
agattacagt gtatctgcaa actccagaat agttattgtc acagcagggtg caaggcagca 360
ggagggagaa actcgccttg ccctgggtcca acgtaatgtg gctataatga aatcaatcat 420
tcctgccata gtccattata gtcctgattg taaaattctt gttgtttcaa atccagtgga 480
tattttgaca tatatagtct ggaagataag tggcttacct gtaactcgtg taattggaag 540
tggttgtaat ctagactctg cccgtttccg ttacctaat ggagaaaagt tgggtgtcca 600
ccccacaagc tgccatgggt ggattattgg agaactgggt gattctagtg tgcccttatg 660
gagtgggggtg aatgttgctg gtgttgctct gaagactctg gaccctaaat taggaacgga 720
ttcagataag gaacactgga aaaatatcca taaacaagtt attcaaagt cctatgaaat 780
tatcaagctg aaggggtata cctcttgggc tattggactg tctgtgatgg atctggtagg 840

342-3PCT.ST25.txt

atccattttg	aaaaatctta	ggagagtgca	cccagtttcc	accatgggta	agggattata	900
tggaataaaa	gaagaactct	ttctcagtat	cccttggtgc	ttggggcgga	atgggtgtctc	960
agatgtttg	aaaattaact	tgaattctga	ggaggaggcc	cttttcaaga	agagtgcaga	1020
aacactttg	aatattcaaa	aggatcta	attttaaat	aaagccttct	aatgttccac	1080
tgtttggaga	acagaagata	gcaggctgtg	tattttaaat	tttgaaagta	ttttcattga	1140
tcttaaaaaa	taaaaacaaa	ttggagacct	g			1171

<210> 2

<211> 1053

<212> DNA

<213> Homo sapiens

<400> 2

ctgtcgttgg	tgtatttttc	tggtgtcact	tctgtgcctt	ccttcaaagg	ttctccaaat	60
gtcaactgtc	aaggagcagc	taattgagaa	gctaattgag	gatgatgaaa	actcccagtg	120
taaaattact	attgtttgaa	ctggtgccgt	aggcatggct	tgtgctatta	gtatcttact	180
gaagattaca	gtgtatctgc	aaactccaga	atagttattg	tcacagcagg	tgcaaggcag	240
caggagggag	aaactcgcct	tgccctggtc	caacgtaatg	tggctataat	gaaatcaatc	300
attcctgcca	tagtccatta	tagtcctgat	tgtaaaattc	ttgttgtttc	aaatccagtg	360
gatattttga	catatatagt	ctggaagata	agtggcttac	ctgtaactcg	tgtaattgga	420
agtggttgta	atctagactc	tgcccgtttc	cgttacctaa	ttggagaaaa	gttgggtgtc	480
cacccacaaa	gctgccatgg	ttggattatt	ggagaacatg	gtgattctag	tgtgccctta	540
tggagtgggg	tgaatgttgc	tggtgttgct	ctgaagactc	tggaccctaa	attaggaacg	600
gattcagata	aggaacactg	gaaaaatatc	cataaacaag	ttattcaaag	tgcctatgaa	660
attatcaagc	tgaaggggta	tacctcttgg	gctattggac	tgtctgtgat	ggatctggta	720
ggatccattt	tgaaaaatct	taggagagtg	caccagttt	ccaccatggg	taagggatta	780
tatggaataa	aagaagaact	ctttctcagt	atcccttgtg	tcttggggcg	gaatgggtgc	840
tcagatgttg	tgaaaattaa	cttgaattct	gaggaggagg	cccttttcaa	gaagagtgca	900
gaaacacttt	ggaatattca	aaaggatcta	atattttaaa	ttaaagcctt	ctaattgttcc	960
actgttttga	gaacagaaga	tagcaggctg	tgtattttta	attttgaaag	tattttcatt	1020
gatcttaaaa	aataaaaaca	aattggagac	ctg			1053

<210> 3

<211> 879

<212> DNA

<213> Homo sapiens

<400> 3

```

ctgtcgttgg tgtatttttc tgggtgtcact tctgtgcctt ccttcaaagg ttctccaaat    60
gtcaactgtc aaggagcagc taattgagaa gctaattgag gatgatgaaa actcccagtg    120
taaaattact attgttggaa ctggtgccgt aggcattggct tgtgctatta gtatcttact    180
gaagtggata ttttgacata tatagtctgg aagataagtg gcttacctgt aactcgtgta    240
attggaagtg gttgtaatct agactctgcc cgtttccgtt acctaattgg agaaaagttg    300
ggtgtccacc ccacaagctg ccatggttgg attattggag aacatgggtga ttctagtgtg    360
cccttatgga gtgggggtgaa tgttgctggt gttgctctga agactctgga ccctaaatta    420
ggaacggatt cagataagga aacttgga aaatatccata aacaagttat tcaaagtgcc    480
tatgaaatta tcaagctgaa ggggtatacc tcttgggcta ttggactgtc tgtgatggat    540
ctggtaggat ccattttgaa aaatcttagg agagtgcacc cagtttccac catggttaag    600
ggattatatg gaataaaaga agaactcttt ctcagtatcc cttgtgtctt ggggcggaat    660
ggtgtctcag atgttgtgaa aattaacttg aattctgagg aggaggccct tttcaagaag    720
agtcagaaaa cactttggaa tattcaaaag gatctaatat tttaaattaa agccttctaa    780
tgttccactg tttggagaac agaagatagc aggctgtgta ttttaaattt tgaaagtatt    840
ttcattgatc ttaaaaaata aaaacaaatt ggagacctg    879

```

<210> 4

<211> 811

<212> DNA

<213> Homo sapiens

<400> 4

```

ctgtcgttgg tgtatttttc tgggtgtcact tctgtgcctt ccttcaaagg ttctccaaat    60
gtcaactgtc aaggagcagc taattgagaa gctaattgag gatgatgaaa actcccagtg    120
taaaattact attgttggaa ctggtgccgt aggcattggct tgtgctatta gtatcttact    180
gaagattaca gtgtatctgc aaactccaga atagtatttg tcacagcagg tgcaaggcag    240
caggagggag aaactcgcct tgccctggtc caacgtaatg tggctataat gaaatcaatc    300
attcctgcca tagtccatta tagtcctgat tgtaaaattc ttgttgtttc aaatccagtg    360
gatattttga catatatagt ctggaagata agtggcttac ctgtaactcg tgtaattgga    420
agtggttgta atctagactc tgcccgtttc cgttacctaa ttggagaaaa gttgggtgtc    480
caccacacaa gctgccatgg ttggattatt ggagaacatg gtgattctag tgggattata    540
tggaataaaa gaagaactct ttctcagtat cccttgtgtc ttggggcgga atggtgtctc    600

```

342-3PCT.ST25.txt

agatgttgtg aaaattaact tgaattctga ggaggaggcc cttttcaaga agagtgcaga 660
aacacttttg aatattcaaa aggatctaata attttaaatt aaagccttct aatgttccac 720
tgtttgagaga acagaagata gcaggctgtg tattttaaat tttgaaagta ttttcattga 780
tcttaaaaaa taaaaacaaa ttggagacct g 811

<210> 5

<211> 1047

<212> DNA

<213> Homo sapiens

<400> 5

ctgtcgttgg tgtatttttc tgggtgtcact tctgtgcctt ctttcaaagg ttctccaaat 60
gtcaactgtc aaggagcagc taattgagaa gctaattgag gatgatgaaa actcccagtg 120
taaaattact attgttgga ctggtgccgt aggcatggct tgtgctatta gtatcttact 180
gaaggatttg gctgatgaac ttgcccttgt tgatgttgca ttggacaaac tgaaggagaga 240
aatgatggat cttcagcatg gcagtccttt ctttagtact tcaaagatta cttctggaaa 300
agattacagt gtatctgcaa actccagaat agttattgtc acagcaggtg caaggcagca 360
ggaggggagaa actcgccttg ccctgggtcca acgtaatgtg gctataatga aatcaatcat 420
tcctgccata gtccattata gtcctgattg taaaattctt gttgtttcaa atccagtggg 480
tattttgaca tatatagtct ggaagataag tggcttacct gtaactcgtg taattggaag 540
tggttgtaat ctagactctg cccgtttccg ttacctaat ggagaaaagt tgggtgtcca 600
ccccacaagc tgccatgggt ggattattgg agaacatggg gattctagtg tgcccttatg 660
gagtgggggtg aatgttgctg gtgttgctct gaagactctg gaccctaaat taggaacgga 720
ttcagataag gaacactgga aaaatatcca taaacaagtt attcaaaggg attatatgga 780
ataaaagaag aactctttct cagtatccct tgtgtcttgg ggcggaatgg tgtctcagat 840
gttggtgaaaa ttaacttgaa ttctgaggag gaggcccttt tcaagaagag tgcagaaaca 900
ctttggaata ttcaaaagga tctaataatt taaattaaag ctttctaatt ttccactgtt 960
tgagagaacag aagatagcag gctgtgtatt ttaaattttg aaagtatttt cattgatctt 1020
aaaaaataaa aacaaattgg agacctg 1047

<210> 6

<211> 332

<212> PRT

<213> Homo sapiens

<400> 6

Met Ser Thr Val Lys Glu Gln Leu Ile Glu Lys Leu Ile Glu Asp Asp
 1 5 10 15
 Glu Asn Ser Gln Cys Lys Ile Thr Ile Val Gly Thr Gly Ala Val Gly
 20 25 30
 Met Ala Cys Ala Ile Ser Ile Leu Leu Lys Asp Leu Ala Asp Glu Leu
 35 40 45
 Ala Leu Val Asp Val Ala Leu Asp Lys Leu Lys Gly Glu Met Met Asp
 50 55 60
 Leu Gln His Gly Ser Leu Phe Phe Ser Thr Ser Lys Ile Thr Ser Gly
 65 70 75 80
 Lys Asp Tyr Ser Val Ser Ala Asn Ser Arg Ile Val Ile Val Thr Ala
 85 90 95
 Gly Ala Arg Gln Gln Glu Gly Glu Thr Arg Leu Ala Leu Val Gln Arg
 100 105 110
 Asn Val Ala Ile Met Lys Ser Ile Ile Pro Ala Ile Val His Tyr Ser
 115 120 125
 Pro Asp Cys Lys Ile Leu Val Val Ser Asn Pro Val Asp Ile Leu Thr
 130 135 140
 Tyr Ile Val Trp Lys Ile Ser Gly Leu Pro Val Thr Arg Val Ile Gly
 145 150 155 160
 Ser Gly Cys Asn Leu Asp Ser Ala Arg Phe Arg Tyr Leu Ile Gly Glu
 165 170 175
 Lys Leu Gly Val His Pro Thr Ser Cys His Gly Trp Ile Ile Gly Glu
 180 185 190
 His Gly Asp Ser Ser Val Pro Leu Trp Ser Gly Val Asn Val Ala Gly
 195 200 205
 Val Ala Leu Lys Thr Leu Asp Pro Lys Leu Gly Thr Asp Ser Asp Lys
 210 215 220
 Glu His Trp Lys Asn Ile His Lys Gln Val Ile Gln Ser Ala Tyr Glu
 225 230 235 240
 Ile Ile Lys Leu Lys Gly Tyr Thr Ser Trp Ala Ile Gly Leu Ser Val
 245 250 255
 Met Asp Leu Val Gly Ser Ile Leu Lys Asn Leu Arg Arg Val His Pro
 Page 5

Val Ser Thr Met Val Lys Gly Leu Tyr Gly Ile Lys Glu Glu Leu Phe
275 280 285

Leu Ser Ile Pro Cys Val Leu Gly Arg Asn Gly Val Ser Asp Val Val
290 295 300

Lys Ile Asn Leu Asn Ser Glu Glu Glu Ala Leu Phe Lys Lys Ser Ala
305 310 315 320

Glu Thr Leu Trp Asn Ile Gln Lys Asp Leu Ile Phe
325 330

<210> 7

<211> 51

<212> PRT

<213> Homo sapiens

<400> 7

Met Ser Thr Val Lys Glu Gln Leu Ile Glu Lys Leu Ile Glu Asp Asp
1 5 10 15

Glu Asn Ser Gln Cys Lys Ile Thr Ile Val Gly Thr Gly Ala Val Gly
20 25 30

Met Ala Cys Ala Ile Ser Ile Leu Leu Lys Ile Thr Val Tyr Leu Gln
35 40 45

Thr Pro Glu
50

<210> 8

<211> 216

<212> PRT

<213> Homo sapiens

<400> 8

Met Lys Ser Ile Ile Pro Ala Ile Val His Tyr Ser Pro Asp Cys Lys
1 5 10 15

Ile Leu Val Val Ser Asn Pro Val Asp Ile Leu Thr Tyr Ile Val Trp
20 25 30

Lys Ile Ser Gly Leu Pro Val Thr Arg Val Ile Gly Ser Gly Cys Asn
 35 40 45

Leu Asp Ser Ala Arg Phe Arg Tyr Leu Ile Gly Glu Lys Leu Gly Val
 50 55 60

His Pro Thr Ser Cys His Gly Trp Ile Ile Gly Glu His Gly Asp Ser
 65 70 75 80

Ser Val Pro Leu Trp Ser Gly Val Asn Val Ala Gly Val Ala Leu Lys
 85 90 95

Thr Leu Asp Pro Lys Leu Gly Thr Asp Ser Asp Lys Glu His Trp Lys
 100 105 110

Asn Ile His Lys Gln Val Ile Gln Ser Ala Tyr Glu Ile Ile Lys Leu
 115 120 125

Lys Gly Tyr Thr Ser Trp Ala Ile Gly Leu Ser Val Met Asp Leu Val
 130 135 140

Gly Ser Ile Leu Lys Asn Leu Arg Arg Val His Pro Val Ser Thr Met
 145 150 155 160

Val Lys Gly Leu Tyr Gly Ile Lys Glu Glu Leu Phe Leu Ser Ile Pro
 165 170 175

Cys Val Leu Gly Arg Asn Gly Val Ser Asp Val Val Lys Ile Asn Leu
 180 185 190

Asn Ser Glu Glu Glu Ala Leu Phe Lys Lys Ser Ala Glu Thr Leu Trp
 195 200 205

Asn Ile Gln Lys Asp Leu Ile Phe
 210 215

<210> 9

<211> 45

<212> PRT

<213> Homo sapiens

<400> 9

Met Ser Thr Val Lys Glu Gln Leu Ile Glu Lys Leu Ile Glu Asp Asp
 1 5 10 15

Glu Asn Ser Gln Cys Lys Ile Thr Ile Val Gly Thr Gly Ala Val Gly
 20 25 30

342-3PCT.ST25.txt

Met Ala Cys Ala Ile Ser Ile Leu Leu Lys Trp Ile Phe
 35 40 45

<210> 10

<211> 76

<212> PRT

<213> Homo sapiens

<400> 10

Met Asp Leu Val Gly Ser Ile Leu Lys Asn Leu Arg Arg Val His Pro
 1 5 10 15

Val Ser Thr Met Val Lys Gly Leu Tyr Gly Ile Lys Glu Glu Leu Phe
 20 25 30

Leu Ser Ile Pro Cys Val Leu Gly Arg Asn Gly Val Ser Asp Val Val
 35 40 45

Lys Ile Asn Leu Asn Ser Glu Glu Glu Ala Leu Phe Lys Lys Ser Ala
 50 55 60

Glu Thr Leu Trp Asn Ile Gln Lys Asp Leu Ile Phe
 65 70 75

<210> 11

<211> 109

<212> PRT

<213> Homo sapiens

<400> 11

Met Lys Ser Ile Ile Pro Ala Ile Val His Tyr Ser Pro Asp Cys Lys
 1 5 10 15

Ile Leu Val Val Ser Asn Pro Val Asp Ile Leu Thr Tyr Ile Val Trp
 20 25 30

Lys Ile Ser Gly Leu Pro Val Thr Arg Val Ile Gly Ser Gly Cys Asn
 35 40 45

Leu Asp Ser Ala Arg Phe Arg Tyr Leu Ile Gly Glu Lys Leu Gly Val
 50 55 60

His Pro Thr Ser Cys His Gly Trp Ile Ile Gly Glu His Gly Asp Ser
 65 70 75 80

1

50

55

60

Leu Gln His Gly Ser Leu Phe Phe Ser Thr Ser Lys Ile Thr Ser Gly
65 70 75 80

Lys Asp Tyr Ser Val Ser Ala Asn Ser Arg Ile Val Ile Val Thr Ala
85 90 95

Gly Ala Arg Gln Gln Glu Gly Glu Thr Arg Leu Ala Leu Val Gln Arg
100 105 110

Asn Val Ala Ile Met Lys Ser Ile Ile Pro Ala Ile Val His Tyr Ser
115 120 125

Pro Asp Cys Lys Ile Leu Val Val Ser Asn Pro Val Asp Ile Leu Thr
130 135 140

Tyr Ile Val Trp Lys Ile Ser Gly Leu Pro Val Thr Arg Val Ile Gly
145 150 155 160

Ser Gly Cys Asn Leu Asp Ser Ala Arg Phe Arg Tyr Leu Ile Gly Glu
165 170 175

Lys Leu Gly Val His Pro Thr Ser Cys His Gly Trp Ile Ile Gly Glu
180 185 190

His Gly Asp Ser Ser Val Pro Leu Trp Ser Gly Val Asn Val Ala Gly
195 200 205

Val Ala Leu Lys Thr Leu Asp Pro Lys Leu Gly Thr Asp Ser Asp Lys
210 215 220

Glu His Trp Lys Asn Ile His Lys Gln Val Ile Gln Arg Asp Tyr Met
225 230 235 240

Glu

<210> 14

<211> 23

<212> PRT

<213> Homo sapiens

<400> 14

Gly Ala Val Gly Met Ala Cys Ala Ile Ser Ile Leu Leu Lys Ile Thr
1 5 10 15

Val Tyr Leu Gln Thr Pro Glu
20

<210> 15

<211> 17

<212> PRT

<213> Homo sapiens

<400> 15

Gly Ala Val Gly Met Ala Cys Ala Ile Ser Ile Leu Leu Lys Trp Ile
1 5 10 15

Phe

<210> 16

<211> 39

<212> PRT

<213> Homo sapiens

<400> 16

Gly Trp Ile Ile Gly Glu His Gly Asp Ser Ser Gly Ile Ile Trp Asn
1 5 10 15

Lys Arg Arg Thr Leu Ser Gln Tyr Pro Leu Cys Leu Gly Ala Glu Trp
20 25 30

Cys Leu Arg Cys Cys Glu Asn
35

<210> 17

<211> 23

<212> PRT

<213> Homo sapiens

<400> 17

Met Val Gly Leu Leu Glu Asn Met Val Ile Leu Val Gly Leu Tyr Gly
1 5 10 15

Ile Lys Glu Glu Leu Phe Leu
20

<210> 18

<211> 17

<212> PRT

<213> Homo sapiens

<400> 18

Glu His Trp Lys Asn Ile His Lys Gln Val Ile Gln Arg Asp Tyr Met
 1 5 10 15

Glu

<210> 19

<211> 2168

<212> DNA

<213> Homo sapiens

<400> 19

```

gaatccgcgg ggagggcaca acagctgcta cctgaacagt ttctgaccca acagttaccc 60
agcgccggac tcgctgcgcc ccggcggtc tagggacccc cggcgctac acttagctcc 120
gcgcccgaga gaatgttgga ccgacgacac aagacctcag acttgtgtta ttctagcagc 180
tgaacacacc ccaggctctt ctgaccggca gtggctctgg aagcagtctg gtgtatagag 240
ttatggattc actaccagat tctactgtat gctcttgaca actatgacca caatgggtcca 300
cccacaaatg aattatcagg agtgaacca gaggcacgta tgaatgaaag tcctgatccg 360
actgacctgg cgggagtcatt cattgagctc ggccccaatg acagtccaca gacaagtgaa 420
tttaaaggag caaccgagga ggcacctgcg aaagaaagcc cacacacaag tgaatttaaa 480
ggagcagccc ggggtgtcacc tatcagtgaag agtgtgttag cacgactttc caagtttgaa 540
gttgaagatg ctgaaaatgt tgcttcatat gacagcaaga ttaagaaaat tgtgcattca 600
attgtatcat cctttgcatt tggactatct ggagttttcc tggctttact ggatgtcact 660
ctcatccttg ccgacctaat tttactgac agcaaacttt atattccttt ggagtatcgt 720
tctattttct tagctattgc cttatTTTTT ctcatggatg ttcttcttcg agtatttgta 780
gaaaggagac agcagtatct ttctgactta tttaacattt tagatactgc cattattgtg 840
attcttctgc tggttgatgt cgtttacatt ttttttgaca ttaagttgct taggaatatt 900
cccagatgga cacatttact tcgacttcta cgacttatta ttctgttaag aatttttcat 960
ctgtttcatc aaaaaagaca acttgaaaag ctgataagaa ggcgggtttc agaaaacaaa 1020
aggcgataca caagggatgg atttgacctt gacctcactt acgttacaga acgtattatt 1080

```

342-3PCT.ST25.txt

gctatgtcat	ttccatcttc	tggaaggcag	tctttctata	gaaatccaat	caaggaagtt	1140
gtgcggtttc	tagataagaa	acaccgaaac	cactatcgag	tctacaatct	atgcagtga	1200
agagcttacg	atcctaagca	cttccataat	agggtcgtta	gaatcatgat	tgatgatcat	1260
aatgtcccca	ctctacatca	gatggtgggt	ttcaccaagg	aagtaaata	gtggatggct	1320
caagatcttg	aaaacatcgt	agcgattcac	tgtaaaggag	gcacagatag	aacaggaact	1380
atggtttgtg	ccttccttat	tgcctctgaa	atatgttcaa	ctgcaaagga	aagcctgtat	1440
tattttggag	aaaggcgaac	agataaaacc	cacagcgaaa	aatttcaggg	agtagaaact	1500
ccttctcaga	agagatatgt	tgcatatttt	gcacaagtga	aacatctcta	caactggaat	1560
ctccctccaa	gacggatact	ctttataaaa	cacttcatta	tttattcgat	tcctcgttat	1620
gtacgtgatc	taaaaatcca	aatagaaatg	gagaaaaagg	ttgtcttttc	cactatttca	1680
ttaggaaaat	gttcggtact	tgataacatt	acaacagaca	aaatattaat	tgatgtattc	1740
gacggtccac	ctctgtatga	tgatgtgaaa	gtgcagtttt	tctattcgaa	tcttcctaca	1800
tactatgaca	attgctcatt	ttacttctgg	ttgcacacat	cttttattga	aaataacagg	1860
ctttatctac	caaaaaatga	attggataat	ctacataaac	aaaaagcacg	gagaatttat	1920
ccatcagatt	ttgccgtgga	gatacttttt	ggcgagaaaa	tgacttccag	tgatgttgta	1980
gctggatccg	attaagtata	gctccccctt	ccccttctgg	gaaagaatta	tgttctttcc	2040
aaccctgcca	catgttcata	tatcctaaat	ctatcctaaa	tgttcccttg	aagtatttat	2100
ttatgtttat	atatgtttat	acatgttctt	caataaatct	attacatata	tataaaaaaa	2160
aaaaaaaa						2168

<210> 20

<211> 2114

<212> DNA

<213> Homo sapiens

<400> 20

gaatccgcgg	ggagggcaca	acagctgcta	cctgaacagt	ttctgacca	acagttaccc	60
agcgccggac	tcgctgcgcc	ccggcggtc	tagggacccc	cggcgctac	acttagctcc	120
gcgcccgaga	gaatgttgga	ccgacgacac	aagacctcag	acttgtgtta	ttctagcagc	180
tgaacacacc	ccaggctctt	ctgaccggca	gtggctctgg	aagcagtctg	gtgtatagag	240
ttatggattc	actaccagat	tctactgtat	gctcttgaca	actatgacca	caatgggtcca	300
cccacaaatg	aattatcagg	agtgaacca	gaggcacgta	tgaatgaaag	tcctgatccg	360
actgacctgg	cgggagtcac	cattgagctc	ggccccaatg	acagtccaca	gacaagtga	420
tttaaaggag	caaccgagga	ggcacctgcg	aaagaaagtg	tgtagcacg	actttccaag	480

342-3PCT.ST25.txt

tttgaagttg aagatgctga aaatggttgct tcatatgaca gcaagattaa gaaaattgtg	540
cattcaattg tatcatcctt tgcatttgga ctatttgagag ttttcctggt cttactggat	600
gtcactctca tccttgccga cctaattttc actgacagca aactttatat tcctttggag	660
tatcgttcta tttctctagc tattgcctta ttttttctca tggatgttct tcttcgagta	720
tttgtagaaa ggagacagca gtatttttct gacttattta acattttaga tactgccatt	780
attgtgattc ttctgctggt tgatgtcgtt tacatttttt ttgacattaa gttgcttagg	840
aatattccca gatggacaca tttacttcga cttctacgac ttattattct gttaagaatt	900
tttcatctgt ttcatcaaaa aagacaactt gaaaagctga taagaaggcg ggtttcagaa	960
aacaaaaggc gatacacaa g gatggattt gacctagacc tcacttacgt tacagaacgt	1020
attattgcta tgtcatttcc atcttctgga aggcagtctt tctatagaaa tccaatcaag	1080
gaagttgtgc ggtttctaga taagaaacac cgaaaccact atcgagtcta caatctatgc	1140
agtgaagag cttacgatcc taagcacttc cataataggg tcgttagaat catgattgat	1200
gatcataatg tccccactct acatcagatg gtggttttca ccaaggaagt aaatgagtgg	1260
atggctcaag atcttgaaaa catcgtagcg attcactgta aaggaggcac agatagaaca	1320
ggaactatgg tttgtgcctt ccttattgcc tctgaaatat gttcaactgc aaaggaaagc	1380
ctgtattatt ttggagaaa ggcgaacagat aaaaccaca gcgaaaaatt tcagggagta	1440
gaaactcctt ctcagaagag atatgttgca tattttgcac aagtgaaca tctctacaac	1500
tggaatctcc ctccaagacg gatactcttt ataaaacact tcattattta ttcgattcct	1560
cgttatgtac gtgatctaaa aatccaaata gaaatggaga aaaagggtgt cttttccact	1620
atttcattag gaaaatgttc ggtacttgat aacattacaa cagacaaaat attaattgat	1680
gtattcgacg gtccacctct gtatgatgat gtgaaagtgc agtttttcta ttcgaatctt	1740
cctacatact atgacaattg ctcattttac ttctggttgc acacatcttt tattgaaaat	1800
aacaggcttt atctaccaa aaatgaattg gataatctac ataaacaaaa agcacggaga	1860
atttatccat cagattttgc cgtggagata ctttttggcg agaaaatgac ttccagtgat	1920
gttgtagctg gatccgatta agtatagctc ccccttcccc ttctgggaaa gaattatggt	1980
ctttccaacc ctgccacatg ttcatatatc ctaaacttat cctaaatggt cccttgaagt	2040
atttatttat gtttatatat gttatacat gttcttcaat aaatctatta catatatata	2100
aaaaaaaaaa aaaa	2114

<210> 21

<211> 2222

<212> DNA

<213> Homo sapiens

342-3PCT.ST25.txt

<400> 21
 gaatccgcgg ggagggcaca acagctgcta cctgaacagt ttctgaccca acagttaccc 60
 agcgccggac tcgctgcgcc ccggcggtc tagggacccc cggcgctac acttagctcc 120
 gcgcccgaga gaatgttgga ccgacgacac aagacctcag acttgtgtta ttctagcagc 180
 tgaacacacc ccaggctctt ctgaccggca gtggctctgg aagcagtctg gtgtatagag 240
 ttatggattc actaccagat tctactgtat gctcttgaca actatgacca caatgggtcca 300
 cccacaaatg aattatcagg agtgaacca gaggcacgta tgaatgaaag tcctgatccg 360
 actgacctgg cgggagtcac cattgagctc ggccccaatg acagtccaca gacaagtga 420
 tttaaaggag caaccgagga ggcacctgcg aaagaaagcc cacacacaag tgaatttaaa 480
 ggagcagccc ggggtgtcacc tatcagtga agtgtgttag cacgactttc caagtttgaa 540
 gttgaagatg ctgaaaatgt tgcttcatat gacagcaaga ttaagaaaat tgtgcattca 600
 attgtatcat cctttgcatt tggactattt ggagttttcc tggcttact ggatgtcact 660
 ctcatccttg ccgacctaat tttactgac agcaaacttt atattccttt ggagtatcgt 720
 tctattttct tagctattgc cttatTTTTT ctcatggatg ttcttcttcg agtatttgta 780
 gaaaggagac agcagtatTT ttctgactta tttaacatTT tagatactgc cattattgtg 840
 attcttctgc tggttgatgt cgtttacatt ttttttgaca ttaagttgct taggaatatt 900
 cccagatgga cacatttact tcgacttcta cgacttatta ttctgttaag aatttttcat 960
 ctgtttcatc aaaaaagaca acttgaaaag ctgataagaa ggcgggtttc agaaaacaaa 1020
 aggcgataca caagggatgg atttgaccta gacctcactt acgttacaga acgtattatt 1080
 gctatgtcat ttccatcttc tggaaggcag tctttctata gaaatccaat caaggaagtt 1140
 gtgcgggttt tagataagaa acaccgaaac cactatcgag tctacaatct atgcagtatg 1200
 tacattactc tatattgtgc tactgtagat agaaaacaga ttactgcacg tgaaagagct 1260
 tacgatccta agcacttcca taatagggtc gttagaatca tgattgatga tcataatgtc 1320
 cccactctac atcagatggg ggttttcacc aaggaagtaa atgagtggat ggctcaagat 1380
 cttgaaaaca tcgtagcgat tcaactgtaa ggaggcacag atagaacagg aactatgggt 1440
 tgtgccttcc ttattgcctc tgaaatatgt tcaactgcaa aggaaagcct gtattatttt 1500
 ggagaaaggc gaacagataa aaccacagc gaaaaatttc agggagtaga aactccttct 1560
 cagaagagat atgttgcata ttttgacaa gtgaaacatc tctacaactg gaatctccct 1620
 ccaagacgga tactctttat aaaacacttc attatttatt cgattcctcg ttatgtacgt 1680
 gatctaaaaa tccaaataga aatggagaaa aaggttgtct tttccactat ttcattagga 1740
 aaatgttcgg tacttgataa cattacaaca gacaaaatat taattgatgt attcgacgg 1800
 ccacctctgt atgatgatgt gaaagtgcag tttttctatt cgaatcttcc tacatactat 1860
 gacaattgct catTTTactt ctggttgac acatctttta ttgaaaataa caggctttat 1920
 ctaccaaaaa atgaattgga taatctacat aaacaaaaag cacggagaat ttatccatca 1980

342-3PCT.ST25.txt

gattttgccg tggagatact ttttggcgag aaaatgactt ccagtgatgt tgtagctgga 2040
 tccgattaag tatagctccc ctttcccctt ctgggaaaga attatgttct ttccaaccct 2100
 gccacatggt catatatcct aaatctatcc taaatgttcc cttgaagtat ttatttatgt 2160
 ttatatatgt ttatacatgt tcttcaataa atctattaca tatatataaa aaaaaaaaaa 2220
 aa 2222

<210> 22

<211> 551

<212> PRT

<213> Homo sapiens

<400> 22

Met Asn Glu Ser Pro Asp Pro Thr Asp Leu Ala Gly Val Ile Ile Glu
 1 5 10 15
 Leu Gly Pro Asn Asp Ser Pro Gln Thr Ser Glu Phe Lys Gly Ala Thr
 20 25 30
 Glu Glu Ala Pro Ala Lys Glu Ser Pro His Thr Ser Glu Phe Lys Gly
 35 40 45
 Ala Ala Arg Val Ser Pro Ile Ser Glu Ser Val Leu Ala Arg Leu Ser
 50 55 60
 Lys Phe Glu Val Glu Asp Ala Glu Asn Val Ala Ser Tyr Asp Ser Lys
 65 70 75 80
 Ile Lys Lys Ile Val His Ser Ile Val Ser Ser Phe Ala Phe Gly Leu
 85 90 95
 Phe Gly Val Phe Leu Val Leu Leu Asp Val Thr Leu Ile Leu Ala Asp
 100 105 110
 Leu Ile Phe Thr Asp Ser Lys Leu Tyr Ile Pro Leu Glu Tyr Arg Ser
 115 120 125
 Ile Ser Leu Ala Ile Ala Leu Phe Phe Leu Met Asp Val Leu Leu Arg
 130 135 140
 Val Phe Val Glu Arg Arg Gln Gln Tyr Phe Ser Asp Leu Phe Asn Ile
 145 150 155 160
 Leu Asp Thr Ala Ile Ile Val Ile Leu Leu Leu Val Asp Val Val Tyr
 165 170 175

342-3PCT.ST25.txt

Ile Phe Phe Asp Ile Lys Leu Leu Arg Asn Ile Pro Arg Trp Thr His
 180 185 190
 Leu Leu Arg Leu Leu Arg Leu Ile Ile Leu Leu Arg Ile Phe His Leu
 195 200 205
 Phe His Gln Lys Arg Gln Leu Glu Lys Leu Ile Arg Arg Arg Val Ser
 210 215 220
 Glu Asn Lys Arg Arg Tyr Thr Arg Asp Gly Phe Asp Leu Asp Leu Thr
 225 230 235 240
 Tyr Val Thr Glu Arg Ile Ile Ala Met Ser Phe Pro Ser Ser Gly Arg
 245 250 255
 Gln Ser Phe Tyr Arg Asn Pro Ile Lys Glu Val Val Arg Phe Leu Asp
 260 265 270
 Lys Lys His Arg Asn His Tyr Arg Val Tyr Asn Leu Cys Ser Glu Arg
 275 280 285
 Ala Tyr Asp Pro Lys His Phe His Asn Arg Val Val Arg Ile Met Ile
 290 295 300
 Asp Asp His Asn Val Pro Thr Leu His Gln Met Val Val Phe Thr Lys
 305 310 315 320
 Glu Val Asn Glu Trp Met Ala Gln Asp Leu Glu Asn Ile Val Ala Ile
 325 330 335
 His Cys Lys Gly Gly Thr Asp Arg Thr Gly Thr Met Val Cys Ala Phe
 340 345 350
 Leu Ile Ala Ser Glu Ile Cys Ser Thr Ala Lys Glu Ser Leu Tyr Tyr
 355 360 365
 Phe Gly Glu Arg Arg Thr Asp Lys Thr His Ser Glu Lys Phe Gln Gly
 370 375 380
 Val Glu Thr Pro Ser Gln Lys Arg Tyr Val Ala Tyr Phe Ala Gln Val
 385 390 395 400
 Lys His Leu Tyr Asn Trp Asn Leu Pro Pro Arg Arg Ile Leu Phe Ile
 405 410 415
 Lys His Phe Ile Ile Tyr Ser Ile Pro Arg Tyr Val Arg Asp Leu Lys
 420 425 430
 Ile Gln Ile Glu Met Glu Lys Lys Val Val Phe Ser Thr Ile Ser Leu
 435 440 445

342-3PCT.ST25.txt

Gly Lys Cys Ser Val Leu Asp Asn Ile Thr Thr Asp Lys Ile Leu Ile
450 455 460

Asp Val Phe Asp Gly Pro Pro Leu Tyr Asp Asp Val Lys Val Gln Phe
465 470 475 480

Phe Tyr Ser Asn Leu Pro Thr Tyr Tyr Asp Asn Cys Ser Phe Tyr Phe
485 490 495

Trp Leu His Thr Ser Phe Ile Glu Asn Asn Arg Leu Tyr Leu Pro Lys
500 505 510

Asn Glu Leu Asp Asn Leu His Lys Gln Lys Ala Arg Arg Ile Tyr Pro
515 520 525

Ser Asp Phe Ala Val Glu Ile Leu Phe Gly Glu Lys Met Thr Ser Ser
530 535 540

Asp Val Val Ala Gly Ser Asp
545 550

<210> 23

<211> 533

<212> PRT

<213> Homo sapiens

<400> 23

Met Asn Glu Ser Pro Asp Pro Thr Asp Leu Ala Gly Val Ile Ile Glu
1 5 10 15

Leu Gly Pro Asn Asp Ser Pro Gln Thr Ser Glu Phe Lys Gly Ala Thr
20 25 30

Glu Glu Ala Pro Ala Lys Glu Ser Val Leu Ala Arg Leu Ser Lys Phe
35 40 45

Glu Val Glu Asp Ala Glu Asn Val Ala Ser Tyr Asp Ser Lys Ile Lys
50 55 60

Lys Ile Val His Ser Ile Val Ser Ser Phe Ala Phe Gly Leu Phe Gly
65 70 75 80

Val Phe Leu Val Leu Leu Asp Val Thr Leu Ile Leu Ala Asp Leu Ile
85 90 95

Phe Thr Asp Ser Lys Leu Tyr Ile Pro Leu Glu Tyr Arg Ser Ile Ser
100 105 110

342-3PCT.ST25.txt

Leu Ala Ile Ala Leu Phe Phe Leu Met Asp Val Leu Leu Arg Val Phe
 115 120 125
 Val Glu Arg Arg Gln Gln Tyr Phe Ser Asp Leu Phe Asn Ile Leu Asp
 130 135 140
 Thr Ala Ile Ile Val Ile Leu Leu Leu Val Asp Val Val Tyr Ile Phe
 145 150 155 160
 Phe Asp Ile Lys Leu Leu Arg Asn Ile Pro Arg Trp Thr His Leu Leu
 165 170 175
 Arg Leu Leu Arg Leu Ile Ile Leu Leu Arg Ile Phe His Leu Phe His
 180 185 190
 Gln Lys Arg Gln Leu Glu Lys Leu Ile Arg Arg Arg Val Ser Glu Asn
 195 200 205
 Lys Arg Arg Tyr Thr Arg Asp Gly Phe Asp Leu Asp Leu Thr Tyr Val
 210 215 220
 Thr Glu Arg Ile Ile Ala Met Ser Phe Pro Ser Ser Gly Arg Gln Ser
 225 230 235 240
 Phe Tyr Arg Asn Pro Ile Lys Glu Val Val Arg Phe Leu Asp Lys Lys
 245 250 255
 His Arg Asn His Tyr Arg Val Tyr Asn Leu Cys Ser Glu Arg Ala Tyr
 260 265 270
 Asp Pro Lys His Phe His Asn Arg Val Val Arg Ile Met Ile Asp Asp
 275 280 285
 His Asn Val Pro Thr Leu His Gln Met Val Val Phe Thr Lys Glu Val
 290 295 300
 Asn Glu Trp Met Ala Gln Asp Leu Glu Asn Ile Val Ala Ile His Cys
 305 310 315 320
 Lys Gly Gly Thr Asp Arg Thr Gly Thr Met Val Cys Ala Phe Leu Ile
 325 330 335
 Ala Ser Glu Ile Cys Ser Thr Ala Lys Glu Ser Leu Tyr Tyr Phe Gly
 340 345 350
 Glu Arg Arg Thr Asp Lys Thr His Ser Glu Lys Phe Gln Gly Val Glu
 355 360 365
 Thr Pro Ser Gln Lys Arg Tyr Val Ala Tyr Phe Ala Gln Val Lys His

370

375

Leu Tyr Asn Trp Asn Leu Pro Pro Arg Arg Ile Leu Phe Ile Lys His
385 390 395 400
Phe Ile Ile Tyr Ser Ile Pro Arg Tyr Val Arg Asp Leu Lys Ile Gln
405 410 415
Ile Glu Met Glu Lys Lys Val Val Phe Ser Thr Ile Ser Leu Gly Lys
420 425 430
Cys Ser Val Leu Asp Asn Ile Thr Thr Asp Lys Ile Leu Ile Asp Val
435 440 445
Phe Asp Gly Pro Pro Leu Tyr Asp Asp Val Lys Val Gln Phe Phe Tyr
450 455 460
Ser Asn Leu Pro Thr Tyr Tyr Asp Asn Cys Ser Phe Tyr Phe Trp Leu
465 470 475 480
His Thr Ser Phe Ile Glu Asn Asn Arg Leu Tyr Leu Pro Lys Asn Glu
485 490 495
Leu Asp Asn Leu His Lys Gln Lys Ala Arg Arg Ile Tyr Pro Ser Asp
500 505 510
Phe Ala Val Glu Ile Leu Phe Gly Glu Lys Met Thr Ser Ser Asp Val
515 520 525
Val Ala Gly Ser Asp
530

<210> 24

<211> 569

<212> PRT

<213> Homo sapiens

<400> 24

Met Asn Glu Ser Pro Asp Pro Thr Asp Leu Ala Gly Val Ile Ile Glu
1 5 10 15
Leu Gly Pro Asn Asp Ser Pro Gln Thr Ser Glu Phe Lys Gly Ala Thr
20 25 30
Glu Glu Ala Pro Ala Lys Glu Ser Pro His Thr Ser Glu Phe Lys Gly
35 40 45

342-3PCT.ST25.txt

Ala Ala Arg Val Ser Pro Ile Ser Glu Ser Val Leu Ala Arg Leu Ser
 50 55 60
 Lys Phe Glu Val Glu Asp Ala Glu Asn Val Ala Ser Tyr Asp Ser Lys
 65 70 75 80
 Ile Lys Lys Ile Val His Ser Ile Val Ser Ser Phe Ala Phe Gly Leu
 85 90 95
 Phe Gly Val Phe Leu Val Leu Leu Asp Val Thr Leu Ile Leu Ala Asp
 100 105 110
 Leu Ile Phe Thr Asp Ser Lys Leu Tyr Ile Pro Leu Glu Tyr Arg Ser
 115 120 125
 Ile Ser Leu Ala Ile Ala Leu Phe Phe Leu Met Asp Val Leu Leu Arg
 130 135 140
 Val Phe Val Glu Arg Arg Gln Gln Tyr Phe Ser Asp Leu Phe Asn Ile
 145 150 155 160
 Leu Asp Thr Ala Ile Ile Val Ile Leu Leu Val Asp Val Val Tyr
 165 170 175
 Ile Phe Phe Asp Ile Lys Leu Leu Arg Asn Ile Pro Arg Trp Thr His
 180 185 190
 Leu Leu Arg Leu Leu Arg Leu Ile Ile Leu Leu Arg Ile Phe His Leu
 195 200 205
 Phe His Gln Lys Arg Gln Leu Glu Lys Leu Ile Arg Arg Arg Val Ser
 210 215 220
 Glu Asn Lys Arg Arg Tyr Thr Arg Asp Gly Phe Asp Leu Asp Leu Thr
 225 230 235 240
 Tyr Val Thr Glu Arg Ile Ile Ala Met Ser Phe Pro Ser Ser Gly Arg
 245 250 255
 Gln Ser Phe Tyr Arg Asn Pro Ile Lys Glu Val Val Arg Phe Leu Asp
 260 265 270
 Lys Lys His Arg Asn His Tyr Arg Val Tyr Asn Leu Cys Ser Met Tyr
 275 280 285
 Ile Thr Leu Tyr Cys Ala Thr Val Asp Arg Lys Gln Ile Thr Ala Arg
 290 295 300
 Glu Arg Ala Tyr Asp Pro Lys His Phe His Asn Arg Val Val Arg Ile
 305 310 315 320

342-3PCT.ST25.txt

Met Ile Asp Asp His Asn Val Pro Thr Leu His Gln Met Val Val Phe
325 330

Thr Lys Glu Val Asn Glu Trp Met Ala Gln Asp Leu Glu Asn Ile Val
340 345 350

Ala Ile His Cys Lys Gly Gly Thr Asp Arg Thr Gly Thr Met Val Cys
355 360 365

Ala Phe Leu Ile Ala Ser Glu Ile Cys Ser Thr Ala Lys Glu Ser Leu
370 375 380

Tyr Tyr Phe Gly Glu Arg Arg Thr Asp Lys Thr His Ser Glu Lys Phe
385 390 395 400

Gln Gly Val Glu Thr Pro Ser Gln Lys Arg Tyr Val Ala Tyr Phe Ala
405 410 415

Gln Val Lys His Leu Tyr Asn Trp Asn Leu Pro Pro Arg Arg Ile Leu
420 425 430

Phe Ile Lys His Phe Ile Ile Tyr Ser Ile Pro Arg Tyr Val Arg Asp
435 440 445

Leu Lys Ile Gln Ile Glu Met Glu Lys Lys Val Val Phe Ser Thr Ile
450 455 460

Ser Leu Gly Lys Cys Ser Val Leu Asp Asn Ile Thr Thr Asp Lys Ile
465 470 475 480

Leu Ile Asp Val Phe Asp Gly Pro Pro Leu Tyr Asp Asp Val Lys Val
485 490 495

Gln Phe Phe Tyr Ser Asn Leu Pro Thr Tyr Tyr Asp Asn Cys Ser Phe
500 505 510

Tyr Phe Trp Leu His Thr Ser Phe Ile Glu Asn Asn Arg Leu Tyr Leu
515 520 525

Pro Lys Asn Glu Leu Asp Asn Leu His Lys Gln Lys Ala Arg Arg Ile
530 535 540

Tyr Pro Ser Asp Phe Ala Val Glu Ile Leu Phe Gly Glu Lys Met Thr
545 550 555 560

Ser Ser Asp Val Val Ala Gly Ser Asp
565

<210> 25

<211> 21
<212> DNA
<213> Artificial Sequence
<220>
<223> Description of artificial sequence: oligonucleotide

<400> 25
tgccgtaggc atggcttggtg c 21

<210> 26
<211> 21
<212> DNA
<213> Artificial Sequence
<220>
<223> Description of artificial sequence: oligonucleotide

<400> 26
caacatctga gacaccattc c 21

<210> 27
<211> 21
<212> DNA
<213> Artificial Sequence
<220>
<223> Description of artificial sequence: oligonucleotide

<400> 27
tggatgtcac tctcatcctt g 21

<210> 28
<211> 21
<212> DNA
<213> Artificial Sequence
<220>
<223> Description of artificial sequence: oligonucleotide

<400> 28
ccatagttcc tgttctatct g 21

<210> 29

<211> 2192

<212> DNA

<213> Homo sapiens

<400> 29

```

agctcagctg ggagcgcaga ggctcacgcc tgtaatccca tcatttgctt aggtctgatac 60
aatctgctcc acacaatttc tcagtgatcc tctgcatctc tgcctacaag ggcctccctg 120
acaccaagt tcatattgct cagaaacagt gaacttgagt ttttcgtttt accttgatct 180
ctctctgaca aagaaatcca gatgatgcaa cacctgatga agacaatata tggaaaatga 240
cagtcttgga aataactttg gctgtcatcc tgactctact gggacttgcc atcctggcta 300
ttttgttaac aagatgggca cgacgtaagc aaagtgaat gtatatctcc agatacagtt 360
cagaacaaag tgctagactt ctggactatg aggatggtag aggatcccga catgcatatc 420
aacacaaagt gacacttcat atgataaccg agagagatcc aaaaagagat tacacaccat 480
caaccaactc tctagcactg tctcgatcaa gtattgcttt acctcaagga tccatgagta 540
gtataaaatg tttaacaaca actgaagaac ctcttccag aactgcagga gccatgatgc 600
aattcacagc cctattcccg gagctacagg acctatcaag ctctctcaaa aaaccattgt 660
gcaaactcca ggacctattg tacaatatct ggatccaatg tcagatcgca tctcacacaa 720
tcaactggtca ccttcagcac ccgcggtcac ccatggcacc cataataatt tcacagagaa 780
ccgcaagtca gctggcagca cctataagaa tacctcaagt tcacactatg gacagttctg 840
gaaaaatcac actgactcct gtggttatat taacaggtta catggacgaa gaacttcgaa 900
aaaaatcttg ttccaaaatc cagattctaa aatgtggagg cactgcaagg tctcagatag 960
ccgagaagaa aacaaggaag caactaaaga atgacatcat atttacgaat tctgtagaat 1020
ccttgaaatc agcacacata aaggagccag aaagagaagg aaaaggcact gatttagaga 1080
aagacaaaat aggaatggag gtcaaggtag acagtgacgc tggaaatacca aaaagacagg 1140
aaaccaact aaaaatcagt gaagatgagt ataccacaag gacagggagc ccaaataaag 1200
aaaagtgtgt cagatgtacc aagaggacag gagtccaagt aaagaagagt gagtcaggtg 1260
tcccaaaagg acaagaagcc caagtaacga agagtgggtt ggttgactg aaaggacagg 1320
aagcccaggt agagaagagt gagatgggtg tgccaagaag acaggaatcc caagtaaaga 1380
agagtcagtc tgggtgtctca aaggacagg aagcccaggt aaagaagagg gagtcagttg 1440
tactgaaagg acaggaagcc caggtagaga agagtgagtt gaaggtagca aaaggacaag 1500
aaggccaagt agagaagact gaggcagatg tgccaaagga acaagaggtc caagaaaaga 1560
agagtgaggc aggtgtactg aaaggaccag aatcccaagt aaagaacact gaggtgagtg 1620
taccagaaac actggaatcc caagtaaaga agagtgagtc aggtgtacta aaaggacagg 1680
aagcccaaga aaagaaggag agttttgagg ataaaggaaa taatgataaa gaaaaggaga 1740

```


342-3PCT.ST25.txt

gagatgcaga gaaagatcca aataaaaaag aaaaaggtga caaaaacaca aaaggtgaca 1800
aaggaaagga caaagttaaa ggaaagagag aatcagaaat caatggtgaa aaatcaaaag 1860
gctcgaaaag gcgaaggcaa atacaggaag gaagtacaac aaaaaagtg aagagtaagg 1920
ataaatTTTT taaaggccca taagacaagt gattattatg attcccatat tccagataca 1980
aaccatatcc cagccattgc ctaaacagat tacaattata aaatcccttt catcttcata 2040
tcacagtttc tgctcttcag aagtttcacc ctttttaatc tctcagccac aaacctcagt 2100
tccaatattg ttataagtta agacgtatat gattccgtca agaaagactg gatactttct 2160
gaagtaaaac attttaatta aagaaaaaaa aa 2192

<210> 30

<211> 568

<212> PRT

<213> Homo sapiens

<400> 30

Met Thr Val Leu Glu Ile Thr Leu Ala Val Ile Leu Thr Leu Leu Gly
1 5 10 15

Leu Ala Ile Leu Ala Ile Leu Leu Thr Arg Trp Ala Arg Arg Lys Gln
20 25 30

Ser Glu Met Tyr Ile Ser Arg Tyr Ser Ser Glu Gln Ser Ala Arg Leu
35 40 45

Leu Asp Tyr Glu Asp Gly Arg Gly Ser Arg His Ala Tyr Gln His Lys
50 55 60

Val Thr Leu His Met Ile Thr Glu Arg Asp Pro Lys Arg Asp Tyr Thr
65 70 75 80

Pro Ser Thr Asn Ser Leu Ala Leu Ser Arg Ser Ser Ile Ala Leu Pro
85 90 95

Gln Gly Ser Met Ser Ser Ile Lys Cys Leu Gln Thr Thr Glu Glu Pro
100 105 110

Pro Ser Arg Thr Ala Gly Ala Met Met Gln Phe Thr Ala Leu Phe Pro
115 120 125

Glu Leu Gln Asp Leu Ser Ser Ser Leu Lys Lys Pro Leu Cys Lys Leu
130 135 140

Gln Asp Leu Leu Tyr Asn Ile Trp Ile Gln Cys Gln Ile Ala Ser His
Page 25

145

150

160

Thr Ile Thr Gly His₁₆₅ Leu Gln His Pro Arg₁₇₀ Ser Pro Met Ala Pro₁₇₅ Ile

Ile Ile Ser Gln₁₈₀ Arg Thr Ala Ser Gln₁₈₅ Leu Ala Ala Pro Ile₁₉₀ Arg Ile

Pro Gln Val₁₉₅ His Thr Met Asp Ser₂₀₀ Ser Gly Lys Ile₂₀₅ Thr Leu Thr Pro

Val Val₂₁₀ Ile Leu Thr Gly Tyr₂₁₅ Met Asp Glu Glu Leu₂₂₀ Arg Lys Lys Ser

Cys Ser Lys Ile Gln Ile₂₃₀ Leu Lys Cys Gly Gly₂₃₅ Thr Ala Arg Ser Gln₂₄₀

Ile Ala Glu Lys Lys₂₄₅ Thr Arg Lys Gln Leu₂₅₀ Lys Asn Asp Ile Ile₂₅₅ Phe

Thr Asn Ser Val₂₆₀ Glu Ser Leu Lys Ser₂₆₅ Ala His Ile Lys Glu₂₇₀ Pro Glu

Arg Glu Gly₂₇₅ Lys Gly Thr Asp Leu₂₈₀ Glu Lys Asp Lys Ile₂₈₅ Gly Met Glu

Val Lys₂₉₀ Val Asp Ser Asp Ala₂₉₅ Gly Ile Pro Lys Arg₃₀₀ Gln Glu Thr Gln

Leu Lys Ile Ser Glu Asp₃₁₀ Glu Tyr Thr Thr Arg₃₁₅ Thr Gly Ser Pro Asn₃₂₀

Lys Glu Lys Cys Val₃₂₅ Arg Cys Thr Lys Arg₃₃₀ Thr Gly Val Gln Val₃₃₅ Lys

Lys Ser Glu Ser₃₄₀ Gly Val Pro Lys Gly₃₄₅ Gln Glu Ala Gln Val₃₅₀ Thr Lys

Ser Gly Leu₃₅₅ Val Val Leu Lys Gly₃₆₀ Gln Glu Ala Gln Val₃₆₅ Glu Lys Ser

Glu Met₃₇₀ Gly Val Pro Arg Arg₃₇₅ Gln Glu Ser Gln Val₃₈₀ Lys Lys Ser Gln

Ser Gly Val Ser Lys Gly₃₉₀ Gln Glu Ala Gln Val₃₉₅ Lys Lys Arg Glu Ser₄₀₀

Val Val Leu Lys Gly₄₀₅ Gln Glu Ala Gln Val₄₁₀ Glu Lys Ser Glu Leu₄₁₅ Lys

342-3PCT.ST25.txt

Val Pro Lys Gly Gln Glu Gly Gln Val Glu Lys Thr Glu Ala Asp Val
 420 425 430

Pro Lys Glu Gln Glu Val Gln Glu Lys Lys Ser Glu Ala Gly Val Leu
 435 440 445

Lys Gly Pro Glu Ser Gln Val Lys Asn Thr Glu Val Ser Val Pro Glu
 450 455 460

Thr Leu Glu Ser Gln Val Lys Lys Ser Glu Ser Gly Val Leu Lys Gly
 465 470 475 480

Gln Glu Ala Gln Glu Lys Lys Glu Ser Phe Glu Asp Lys Gly Asn Asn
 485 490 495

Asp Lys Glu Lys Glu Arg Asp Ala Glu Lys Asp Pro Asn Lys Lys Glu
 500 505 510

Lys Gly Asp Lys Asn Thr Lys Gly Asp Lys Gly Lys Asp Lys Val Lys
 515 520 525

Gly Lys Arg Glu Ser Glu Ile Asn Gly Glu Lys Ser Lys Gly Ser Lys
 530 535 540

Arg Arg Arg Gln Ile Gln Glu Gly Ser Thr Thr Lys Lys Trp Lys Ser
 545 550 555 560

Lys Asp Lys Phe Phe Lys Gly Pro
 565

<210> 31

<211> 1686

<212> DNA

<213> Homo sapiens

<400> 31

atgacagtct tggaaataac tttggctgtc atcctgactc tactgggact tgccatcctg	60
gctatttttgt taacaagatg ggcacgatgt aagcaaagtg aaatgtatat ctccagatac	120
agttcagaac aaagtgctag acttctggac tatgaggatg gtagaggatc ccgacatgca	180
tattcaacac aaagtgcac ttcatatgat aaccgagaga gatccaaaag agattacaca	240
ccatcaacca actctctagc actgtctcga tcaagtattg ctttacctca aggatccatg	300
agtagtataa aatgtttaca aacaactgaa gaacctcctt ccagaactgc aggagccatg	360
atgcaattca cagcccctat tcccggagct acaggaccta tcaagctctc tcaaaaaacc	420
attgtgcaaa ctccaggacc tattgtacaa tatcctggat ccaatgctgg tccaccttca	480

342-3PCT.ST25.txt

gcaccccgcg	gtccacccat	ggcacccata	ataatttcac	agagaaccgc	aagtcagctg	540
gcagcaccta	taataatttc	gcagagaact	gcaagaatac	ctcaagttca	cactatggac	600
agttctggaa	aaatcacact	gactcctgtg	gttatattaa	caggttacat	ggatgaagaa	660
cttgcaaaaa	aatcttgttc	caaaatccag	attctaaaaat	gtggaggcac	tgcaaggctt	720
cagaatagcc	gagaagaaaa	caaggaagca	ctaaagaatg	acatcatatt	tacgaattct	780
gtagaatcct	tgaaatcagc	acacataaag	gagccagaaa	gagaaggaaa	aggcactgat	840
ttagagaaa	acaaaatagg	aatggagggtc	aaggtagaca	gtgacgctgg	aataccaaaa	900
agacaggaaa	cccaactaaa	aatcagtgag	atgagtatac	cacaaggaca	gggagcccaa	960
ataaagaaaa	gtgtgtcaga	tgtaccaaga	ggacaggagt	cccaagtaaa	gaagagtgag	1020
tcagggtgtcc	caaaaggaca	agaagcccaa	gtaacgaaga	gtgggttggt	tgtactgaaa	1080
ggacaggaag	cccaggtaga	gaagagtgag	atgggtgtgc	caagaagaca	ggaatcccaa	1140
gtaaagaaga	gtcagtctgg	tgtctcaaag	ggacaggaag	cccaggtaaa	gaagagggag	1200
tcagttgtac	tgaaaggaca	ggaagcccag	gtagagaaga	gtgagttgaa	ggtaccaaaa	1260
ggacaagaag	gccaagtaga	gaagactgag	gcagatgtgc	caaaggaaca	agaggtccaa	1320
gaaaagaaga	gtgaggcagg	tgtactgaaa	ggaccagaat	cccaagtaaa	gaacactgag	1380
gtgagtgtac	cagaaacact	ggaatcccaa	gtaaagaaga	gtgagtcagg	tgtactaaaa	1440
ggacaggaag	cccaagaaaa	gaaggagagt	tttgaggata	aaggaaataa	tgataaagaa	1500
aaggagagag	atgcagagaa	agatccaaat	aaaaaagaaa	aaggtgacaa	aaacacaaaa	1560
ggtgacaaa	gaaaggacaa	agttaaagga	aagagagaat	cagaaatcaa	tggtgaaaaa	1620
tcaaaaggct	cgaaaagggc	gaaggcaaat	acaggaagga	agtacaacaa	aaaagtggaa	1680
gagtaa						1686

<210> 32

<211> 1710

<212> DNA

<213> Homo sapiens

<400> 32

atgacagtct	tggaataaac	tttggtgtgc	atcctgactc	tactgggact	tgccatcctg	60
gctattttgt	taacaagatg	ggcacgacgt	aagcaaagtg	aaatgcatat	ctccagatac	120
agttcagaac	aaagtgctag	acttctggac	tatgaggatg	gtagaggatc	ccgacatgca	180
tattcaacac	aaagtgcac	ttcatgtgat	aaccgagaga	gatccaaaag	agattacaca	240
ccatcaacca	actctctagc	actgtctcga	tcaagtattg	ctttacctca	aggatccatg	300
agtagtataa	aatgtttaca	aacaactgaa	gaacttcctt	ccagaactgc	aggagccatg	360
atgcaattca	cagcccctat	tcccggagct	acaggaccta	tcaagctctc	tcaaaaaacc	420

342-3PCT.ST25.txt

attgtgcaaa	ctccaggacc	tattgtacaa	tatcctggac	ccaatgtcag	atcgcatcct	480
cacacaatca	ctggtccacc	ttcagcaccc	cgcggtccac	ccatggcacc	cataataatt	540
tcacagagaa	ccgcaagtca	gctggcagca	cctataataa	tttcgcagag	aactgcaaga	600
atacctcaag	ttcacactat	ggacagttct	ggaaaaacca	cactgactcc	tgtggttata	660
ttaacaggtt	acatggatga	agaacttgca	aaaaaatctt	gttcctaaaat	ccagattcta	720
aaatgtggag	gcactgcaag	gtctcagaat	agccgagaag	aaaacaagga	agcactaaag	780
aatgacatca	tatttacgaa	ttctgtagaa	tccttgaaat	cagcacacat	aaaggagcca	840
gaaagagaag	gaaaaggcac	tgatttagag	aaagacaaaa	taggaatgga	ggtcaaggta	900
gacagtgcg	ctggaatacc	aaaaagacag	gaaacccaac	taaaaatcag	tgagatgagt	960
ataccacaag	gacagggagc	ccaataaaag	aaaagtgtgt	cagatgtacc	aagaggacag	1020
gagtcccaag	taaagaagag	tgagtcaggt	gtcccaaaag	gacaagaagc	ccaagtaacg	1080
aagagtgggt	tggttgact	gaaaggacag	gaagcccagg	tagagaagag	tgagatgggt	1140
gtgccaaagaa	gacaggaatc	ccaagtaaag	aagagtcagt	ctggtgtctc	aaagggacag	1200
gaagcccagg	taaagaagag	ggagtcagtt	gtactgaaag	gacaggaagc	ccaggtagag	1260
aagagtgcgt	tgaagggtacc	aaaaggacaa	gaaggccaag	tagagaagac	tgaggcagat	1320
gtgccaaagg	aacaagaggt	ccaagaaaag	aagagtgcgt	caggtgtact	gaaaggacca	1380
gaatcccaag	taaagaacac	tgaggtgagt	gtaccagaaa	cactggaatc	ccaagtaaag	1440
aagagtgcgt	caggtgtact	aaaaggacag	gaagcccagg	aaaagaagga	gagttttgag	1500
gataaaggaa	ataatgataa	agaaaaggag	agagatgcag	agaaagatcc	aaataaaaaa	1560
gaaaaagggtg	acaaaaacac	aaaagggtgac	aaagggaaagg	acaaagttaa	aggaaagaga	1620
gaatcagaaa	tcaatggtga	aaaatcaaaa	ggctcgaaaa	gggcgaaggc	aaatacagga	1680
aggaagtaca	acaaaaaagt	ggaagagtaa				1710

<210> 33

<211> 1665

<212> DNA

<213> Homo sapiens

<400> 33

atgacagtct	tggaataaac	tttggctgtc	atcctgactc	tactgggact	tgccatcctg	60
gctattttgt	taacaagatg	ggcacgatgt	aagcaaaagt	aaatgtatat	ctccagatac	120
agttcagaac	aaagtgcag	acttctggac	tatgaggatg	gtagaggatc	ccgacatgca	180
tattcaacac	aaagtgcag	atccaaaaga	gattacacac	catcaaccaa	ctctctagca	240
ctgtctcgat	caagtattgc	tttacctcaa	ggatccatga	gtagtataaa	atgtttacaa	300

342-3PCT.ST25.txt

```

acaactgaag aacctccttc cagaactgca ggagccatga tgcaattcac agcccctatt 360
cccgaggacta caggacctat caagctctct caaaaaacca ttgtgcaaac tccaggacct 420
attgtacaat atcctggatc caatgctggt ccaccttcag caccgccg cg tccacccatg 480
gcacccataa taatttcaca gagaaccgca agtcagctgg cagcacctat aataatttcg 540
cagagaactg caagaatacc tcaagttcac actatggaca gttctggaaa aatcacactg 600
actcctgtgg ttatattaac aggttacatg gatgaagaac ttgcaaaaaa atcttgttcc 660
aaaatccaga ttctaataatg tggaggcact gcaaggctctc agaatagccg agaagaaaac 720
aaggaagcac taaagaatga catcatatct acgaattctg tagaatcctt gaaatcagca 780
cacataaagg agccagaaaag agaaggaaaa ggcactgatt tagagaaaaga caaatagga 840
atggagggtca aggtagacag tgacgctgga ataccaaaaa gacaggaaaac ccaactaaaa 900
atcagtgaga tgagtatacc acaaggacag ggagcccaaa taaagaaaag tgtgtcagat 960
gtaccaagag gacaggagtc ccaagtaaag aagagtgagt cagggtgtccc aaaaggacaa 1020
gaagcccaag taacgaagag tgggttggtt gtactgaaag gacaggaagc ccaggtagag 1080
aagagtgaga tgggtgtgcc aagaagacag gaatcccaag taaagaagag tcagtctggt 1140
gtctcaaagg gacaggaagc ccaggtaaag aagagggagt cagttgtact gaaaggacag 1200
gaagcccagg tagagaagag tgagttgaag gtaccaaaaag gacaagaagg ccaagtagag 1260
aagactgagg cagatgtgcc aaaggaacaa gaggtccaag aaaagaagag tgaggcaggt 1320
gtactgaaag gaccagaatc ccaagtaaag aacactgagg tgagtgtacc agaaacactg 1380
gaatcccaag taaagaagag tgagtcaggt gtactaaaag gacaggaagc ccaagaaaag 1440
aaggagagtt ttgaggataa aggaaataat gataaagaaa aggagagaga tgcagagaaa 1500
gatccaaata aaaaagaaaa aggtgacaaa aacacaaaag gtgacaaagg aaaggacaaa 1560
gttaaaggaa agagagaatc agaaatcaat ggtgaaaaat caaagggtc gaaaagggcg 1620
aaggcaaata caggaaggaa gtacaacaaa aaagtggaag agtaa 1665

```

<210> 34

<211> 561

<212> PRT

<213> Homo sapiens

<400> 34

```

Met Thr Val Leu Glu Ile Thr Leu Ala Val Ile Leu Thr Leu Leu Gly
1           5           10          15

```

```

Leu Ala Ile Leu Ala Ile Leu Leu Thr Arg Trp Ala Arg Cys Lys Gln
20          25          30

```

Ser Glu Met Tyr Ile Ser Arg Tyr Ser Ser Glu Gln Ser Ala Arg Leu
 35 40 45

Leu Asp Tyr Glu Asp Gly Arg Gly Ser Arg His Ala Tyr Ser Thr Gln
 50 55 60

Ser Asp Thr Ser Tyr Asp Asn Arg Glu Arg Ser Lys Arg Asp Tyr Thr
 65 70 75 80

Pro Ser Thr Asn Ser Leu Ala Leu Ser Arg Ser Ser Ile Ala Leu Pro
 85 90 95

Gln Gly Ser Met Ser Ser Ile Lys Cys Leu Gln Thr Thr Glu Glu Pro
 100 105 110

Pro Ser Arg Thr Ala Gly Ala Met Met Gln Phe Thr Ala Pro Ile Pro
 115 120 125

Gly Ala Thr Gly Pro Ile Lys Leu Ser Gln Lys Thr Ile Val Gln Thr
 130 135 140

Pro Gly Pro Ile Val Gln Tyr Pro Gly Ser Asn Ala Gly Pro Pro Ser
 145 150 155 160

Ala Pro Arg Gly Pro Pro Met Ala Pro Ile Ile Ile Ser Gln Arg Thr
 165 170 175

Ala Ser Gln Leu Ala Ala Pro Ile Ile Ile Ser Gln Arg Thr Ala Arg
 180 185 190

Ile Pro Gln Val His Thr Met Asp Ser Ser Gly Lys Ile Thr Leu Thr
 195 200 205

Pro Val Val Ile Leu Thr Gly Tyr Met Asp Glu Glu Leu Ala Lys Lys
 210 215 220

Ser Cys Ser Lys Ile Gln Ile Leu Lys Cys Gly Gly Thr Ala Arg Ser
 225 230 235 240

Gln Asn Ser Arg Glu Glu Asn Lys Glu Ala Leu Lys Asn Asp Ile Ile
 245 250 255

Phe Thr Asn Ser Val Glu Ser Leu Lys Ser Ala His Ile Lys Glu Pro
 260 265 270

Glu Arg Glu Gly Lys Gly Thr Asp Leu Glu Lys Asp Lys Ile Gly Met
 275 280 285

Glu Val Lys Val Asp Ser Asp Ala Gly Ile Pro Lys Arg Gln Glu Thr
 290 295 300

342-3PCT.ST25.txt

Gln Leu Lys Ile Ser Glu Met Ser Ile Pro Gln Gly Gln Gly Ala Gln
305 310 315 320

Ile Lys Lys Ser Val Ser Asp Val Pro Arg Gly Gln Glu Ser Gln Val
325 330 335

Lys Lys Ser Glu Ser Gly Val Pro Lys Gly Gln Glu Ala Gln Val Thr
340 345 350

Lys Ser Gly Leu Val Val Leu Lys Gly Gln Glu Ala Gln Val Glu Lys
355 360 365

Ser Glu Met Gly Val Pro Arg Arg Gln Glu Ser Gln Val Lys Lys Ser
370 375 380

Gln Ser Gly Val Ser Lys Gly Gln Glu Ala Gln Val Lys Lys Arg Glu
385 390 395 400

Ser Val Val Leu Lys Gly Gln Glu Ala Gln Val Glu Lys Ser Glu Leu
405 410 415

Lys Val Pro Lys Gly Gln Glu Gly Gln Val Glu Lys Thr Glu Ala Asp
420 425 430

Val Pro Lys Glu Gln Glu Val Gln Glu Lys Lys Ser Glu Ala Gly Val
435 440 445

Leu Lys Gly Pro Glu Ser Gln Val Lys Asn Thr Glu Val Ser Val Pro
450 455 460

Glu Thr Leu Glu Ser Gln Val Lys Lys Ser Glu Ser Gly Val Leu Lys
465 470 475 480

Gly Gln Glu Ala Gln Glu Lys Lys Glu Ser Phe Glu Asp Lys Gly Asn
485 490 495

Asn Asp Lys Glu Lys Glu Arg Asp Ala Glu Lys Asp Pro Asn Lys Lys
500 505 510

Glu Lys Gly Asp Lys Asn Thr Lys Gly Asp Lys Gly Lys Asp Lys Val
515 520 525

Lys Gly Lys Arg Glu Ser Glu Ile Asn Gly Glu Lys Ser Lys Gly Ser
530 535 540

Lys Arg Ala Lys Ala Asn Thr Gly Arg Lys Tyr Asn Lys Lys Val Glu
545 550 555 560

Glu

<210> 35

<211> 569

<212> PRT

<213> Homo sapiens

<400> 35

Met Thr Val Leu Glu Ile Thr Leu Ala Val Ile Leu Thr Leu Leu Gly
 1 5 10 15

Leu Ala Ile Leu Ala Ile Leu Leu Thr Arg Trp Ala Arg Arg Lys Gln
 20 25 30

Ser Glu Met His Ile Ser Arg Tyr Ser Ser Glu Gln Ser Ala Arg Leu
 35 40 45

Leu Asp Tyr Glu Asp Gly Arg Gly Ser Arg His Ala Tyr Ser Thr Gln
 50 55 60

Ser Asp Thr Ser Cys Asp Asn Arg Glu Arg Ser Lys Arg Asp Tyr Thr
 65 70 75 80

Pro Ser Thr Asn Ser Leu Ala Leu Ser Arg Ser Ser Ile Ala Leu Pro
 85 90 95

Gln Gly Ser Met Ser Ser Ile Lys Cys Leu Gln Thr Thr Glu Glu Leu
 100 105 110

Pro Ser Arg Thr Ala Gly Ala Met Met Gln Phe Thr Ala Pro Ile Pro
 115 120 125

Gly Ala Thr Gly Pro Ile Lys Leu Ser Gln Lys Thr Ile Val Gln Thr
 130 135 140

Pro Gly Pro Ile Val Gln Tyr Pro Gly Pro Asn Val Arg Ser His Pro
 145 150 155 160

His Thr Ile Thr Gly Pro Pro Ser Ala Pro Arg Gly Pro Pro Met Ala
 165 170 175

Pro Ile Ile Ile Ser Gln Arg Thr Ala Ser Gln Leu Ala Ala Pro Ile
 180 185 190

Ile Ile Ser Gln Arg Thr Ala Arg Ile Pro Gln Val His Thr Met Asp
 195 200 205

Ser Ser Gly Lys Thr Thr Leu Thr Pro Val Val Ile Leu Thr Gly Tyr
 Page 33

210

215

Met Asp Glu Glu Leu Ala Lys Lys Ser Cys Ser Lys Ile Gln Ile Leu
225 230 235 240
Lys Cys Gly Gly Thr Ala Arg Ser Gln Asn Ser Arg Glu Glu Asn Lys
245 250 255
Glu Ala Leu Lys Asn Asp Ile Ile Phe Thr Asn Ser Val Glu Ser Leu
260 265 270
Lys Ser Ala His Ile Lys Glu Pro Glu Arg Glu Gly Lys Gly Thr Asp
275 280 285
Leu Glu Lys Asp Lys Ile Gly Met Glu Val Lys Val Asp Ser Asp Ala
290 295 300
Gly Ile Pro Lys Arg Gln Glu Thr Gln Leu Lys Ile Ser Glu Met Ser
305 310 315 320
Ile Pro Gln Gly Gln Gly Ala Gln Ile Lys Lys Ser Val Ser Asp Val
325 330 335
Pro Arg Gly Gln Glu Ser Gln Val Lys Lys Ser Glu Ser Gly Val Pro
340 345 350
Lys Gly Gln Glu Ala Gln Val Thr Lys Ser Gly Leu Val Val Leu Lys
355 360 365
Gly Gln Glu Ala Gln Val Glu Lys Ser Glu Met Gly Val Pro Arg Arg
370 375 380
Gln Glu Ser Gln Val Lys Lys Ser Gln Ser Gly Val Ser Lys Gly Gln
385 390 395 400
Glu Ala Gln Val Lys Lys Arg Glu Ser Val Val Leu Lys Gly Gln Glu
405 410 415
Ala Gln Val Glu Lys Ser Glu Leu Lys Val Pro Lys Gly Gln Glu Gly
420 425 430
Gln Val Glu Lys Thr Glu Ala Asp Val Pro Lys Glu Gln Glu Val Gln
435 440 445
Glu Lys Lys Ser Glu Ala Gly Val Leu Lys Gly Pro Glu Ser Gln Val
450 455 460
Lys Asn Thr Glu Val Ser Val Pro Glu Thr Leu Glu Ser Gln Val Lys
465 470 475 480

342-3PCT.ST25.txt

Lys Ser Glu Ser Gly Val Leu Lys Gly Gln Glu Ala Gln Glu Lys Lys
485 490 495

Glu Ser Phe Glu Asp Lys Gly Asn Asn Asp Lys Glu Lys Glu Arg Asp
500 505 510

Ala Glu Lys Asp Pro Asn Lys Lys Glu Lys Gly Asp Lys Asn Thr Lys
515 520 525

Gly Asp Lys Gly Lys Asp Lys Val Lys Gly Lys Arg Glu Ser Glu Ile
530 535 540

Asn Gly Glu Lys Ser Lys Gly Ser Lys Arg Ala Lys Ala Asn Thr Gly
545 550 555 560

Arg Lys Tyr Asn Lys Lys Val Glu Glu
565

<210> 36

<211> 554

<212> PRT

<213> Homo sapiens

<400> 36

Met Thr Val Leu Glu Ile Thr Leu Ala Val Ile Leu Thr Leu Leu Gly
1 5 10 15

Leu Ala Ile Leu Ala Ile Leu Leu Thr Arg Trp Ala Arg Cys Lys Gln
20 25 30

Ser Glu Met Tyr Ile Ser Arg Tyr Ser Ser Glu Gln Ser Ala Arg Leu
35 40 45

Leu Asp Tyr Glu Asp Gly Arg Gly Ser Arg His Ala Tyr Ser Thr Gln
50 55 60

Ser Glu Arg Ser Lys Arg Asp Tyr Thr Pro Ser Thr Asn Ser Leu Ala
65 70 75 80

Leu Ser Arg Ser Ser Ile Ala Leu Pro Gln Gly Ser Met Ser Ser Ile
85 90 95

Lys Cys Leu Gln Thr Thr Glu Glu Pro Pro Ser Arg Thr Ala Gly Ala
100 105 110

Met Met Gln Phe Thr Ala Pro Ile Pro Gly Ala Thr Gly Pro Ile Lys
115 120 125

342-3PCT.ST25.txt

Leu Ser Gln Lys Thr Ile Val Gln Thr Pro Gly Pro Ile Val Gln Tyr
 130 135 140
 Pro Gly Ser Asn Ala Gly Pro Pro Ser Ala Pro Arg Gly Pro Pro Met
 145 150 155 160
 Ala Pro Ile Ile Ile Ser Gln Arg Thr Ala Ser Gln Leu Ala Ala Pro
 165 170 175
 Ile Ile Ile Ser Gln Arg Thr Ala Arg Ile Pro Gln Val His Thr Met
 180 185 190
 Asp Ser Ser Gly Lys Ile Thr Leu Thr Pro Val Val Ile Leu Thr Gly
 195 200 205
 Tyr Met Asp Glu Glu Leu Ala Lys Lys Ser Cys Ser Lys Ile Gln Ile
 210 215 220
 Leu Lys Cys Gly Gly Thr Ala Arg Ser Gln Asn Ser Arg Glu Glu Asn
 225 230 235 240
 Lys Glu Ala Leu Lys Asn Asp Ile Ile Phe Thr Asn Ser Val Glu Ser
 245 250 255
 Leu Lys Ser Ala His Ile Lys Glu Pro Glu Arg Glu Gly Lys Gly Thr
 260 265 270
 Asp Leu Glu Lys Asp Lys Ile Gly Met Glu Val Lys Val Asp Ser Asp
 275 280 285
 Ala Gly Ile Pro Lys Arg Gln Glu Thr Gln Leu Lys Ile Ser Glu Met
 290 295 300
 Ser Ile Pro Gln Gly Gln Gly Ala Gln Ile Lys Lys Ser Val Ser Asp
 305 310 315 320
 Val Pro Arg Gly Gln Glu Ser Gln Val Lys Lys Ser Glu Ser Gly Val
 325 330 335
 Pro Lys Gly Gln Glu Ala Gln Val Thr Lys Ser Gly Leu Val Val Leu
 340 345 350
 Lys Gly Gln Glu Ala Gln Val Glu Lys Ser Glu Met Gly Val Pro Arg
 355 360 365
 Arg Gln Glu Ser Gln Val Lys Lys Ser Gln Ser Gly Val Ser Lys Gly
 370 375 380
 Gln Glu Ala Gln Val Lys Lys Arg Glu Ser Val Val Leu Lys Gly Gln
 385 390 395 400

Glu Ala Gln Val Glu Lys Ser Glu Leu Lys Val Pro Lys Gly Gln Glu
 405 410 415
 Gly Gln Val Glu Lys Thr Glu Ala Asp Val Pro Lys Glu Gln Glu Val
 420 425 430
 Gln Glu Lys Lys Ser Glu Ala Gly Val Leu Lys Gly Pro Glu Ser Gln
 435 440 445
 Val Lys Asn Thr Glu Val Ser Val Pro Glu Thr Leu Glu Ser Gln Val
 450 455 460
 Lys Lys Ser Glu Ser Gly Val Leu Lys Gly Gln Glu Ala Gln Glu Lys
 465 470 475 480
 Lys Glu Ser Phe Glu Asp Lys Gly Asn Asn Asp Lys Glu Lys Glu Arg
 485 490 495
 Asp Ala Glu Lys Asp Pro Asn Lys Lys Glu Lys Gly Asp Lys Asn Thr
 500 505 510
 Lys Gly Asp Lys Gly Lys Asp Lys Val Lys Gly Lys Arg Glu Ser Glu
 515 520 525
 Ile Asn Gly Glu Lys Ser Lys Gly Ser Lys Arg Ala Lys Ala Asn Thr
 530 535 540
 Gly Arg Lys Tyr Asn Lys Lys Val Glu Glu
 545 550

<210> 37

<211> 1182

<212> DNA

<213> Homo sapiens

<400> 37

acacaggttg gagcagagaa agaggaaaca tagagggtgcc aaaggaacaa agacataatg	60
atgtcatcca agccaacaag ccatgctgaa gtaaatgaaa ccatacccaa cccttacc	120
ccaggcagct ttatggctcc tggatttcaa cagcctctgg gttcaatcaa cttagaaaac	180
caagctcagg gtgctcagcg tgctcagccc tacggcatca catctccggg aatctttgct	240
agcagtcaac cgggtcaagg aaatatacaa atgataaatc caagtgtggg aacagcagta	300
atgaacttta aagaagaagc aaaggcacta ggggtgatcc agatcatggt tggattgatg	360
cacattgggtt ttggaattgt tttgtgttta atatccttct ctttagaga agtattaggt	420

342-3PCT.ST25.txt

```

tttgccctcta ctgctgttat tgggtggatac ccattctggg gtggcctttc ttttattatc 480
tctggctctc tctctgtgtc agcatccaag gagctttccc gttgtctggt gaaaggcagc 540
ctgggaatga acattgttag ttctatcttg gccttcattg gagtgattct gctgctggtg 600
gatatgtgca tcaatggggg agctggccaa gactactggg ccgtgctttc tggaaaaggc 660
atttcagcca cgctgatgat cttctccctc ttggagttct tcgtagcttg tgccacagcc 720
cattttgcca accaagcaaa caccacaacc aatatgtctg tcctggttat tccaaatatg 780
tatgaaagca accctgtgac accagcgtct tcttcagctc ctcccagatg caacaactac 840
tcagctaatag cccctaaata gtaaaagaaa aaggggtatc agtctaactt catggagaaa 900
aactacttgc aaaaacttct taagaagatg tcttttattg tctacaatga tttctagtct 960
ttaaaaactg tgtttgagat ttgttttttag gttggtcgct aatgatggct gtatctccct 1020
tcaactgtctc ttcctacatt accactacta catgctggca aagggtgaagg atcagaggac 1080
tgaaaaatga ttctgcaact ctcttaaagt tagaaatgtt tctgttcata ttactttttc 1140
cttaataaaa tgtcattaga aacaaaaaaa aaaaaaaaaa aa 1182

```

<210> 38

<211> 267

<212> PRT

<213> Homo sapiens

<400> 38

```

Met Met Ser Ser Lys Pro Thr Ser His Ala Glu Val Asn Glu Thr Ile
1          5          10          15

Pro Asn Pro Tyr Pro Pro Gly Ser Phe Met Ala Pro Gly Phe Gln Gln
          20          25          30

Pro Leu Gly Ser Ile Asn Leu Glu Asn Gln Ala Gln Gly Ala Gln Arg
          35          40          45

Ala Gln Pro Tyr Gly Ile Thr Ser Pro Gly Ile Phe Ala Ser Ser Gln
          50          55          60

Pro Gly Gln Gly Asn Ile Gln Met Ile Asn Pro Ser Val Gly Thr Ala
65          70          75          80

Val Met Asn Phe Lys Glu Glu Ala Lys Ala Leu Gly Val Ile Gln Ile
          85          90          95

Met Val Gly Leu Met His Ile Gly Phe Gly Ile Val Leu Cys Leu Ile
          100          105          110

```

Ser Phe Ser Phe Arg Glu Val Leu Gly Phe Ala Ser Thr Ala Val Ile
 115 120 125

Gly Gly Tyr Pro Phe Trp Gly Gly Leu Ser Phe Ile Ile Ser Gly Ser
 130 135 140

Leu Ser Val Ser Ala Ser Lys Glu Leu Ser Arg Cys Leu Val Lys Gly
 145 150 155 160

Ser Leu Gly Met Asn Ile Val Ser Ser Ile Leu Ala Phe Ile Gly Val
 165 170 175

Ile Leu Leu Leu Val Asp Met Cys Ile Asn Gly Val Ala Gly Gln Asp
 180 185 190

Tyr Trp Ala Val Leu Ser Gly Lys Gly Ile Ser Ala Thr Leu Met Ile
 195 200 205

Phe Ser Leu Leu Glu Phe Phe Val Ala Cys Ala Thr Ala His Phe Ala
 210 215 220

Asn Gln Ala Asn Thr Thr Thr Asn Met Ser Val Leu Val Ile Pro Asn
 225 230 235 240

Met Tyr Glu Ser Asn Pro Val Thr Pro Ala Ser Ser Ser Ala Pro Pro
 245 250 255

Arg Cys Asn Asn Tyr Ser Ala Asn Ala Pro Lys
 260 265

<210> 39

<211> 1948

<212> DNA

<213> Homo sapiens

<400> 39

gcacgagggtt ttgaggacca gcaacacagc aatacttcca gatctccata taacctctgt	60
tcatttgaggga ggggctttgt attttcaaca ggagagttca aagttcattt ttttttcagc	120
aactacagtt ctaagtgaat tctattttta ttgatacatg gtattttaca tgtttatggg	180
atacatatga gtcataatct attttaataa ataccttagt gttgtaaaat caacagtgtc	240
ttttaaaaga aatatacctt gtttaattatc ccacatgtgt ctccagaagt acagcttgaa	300
caaataccacc ttctgtggac caagcaccac cctgggcatt tctagcatga gcaaaatcca	360
aggtcctggc tggactccag agatgctatt tacctcagaa gcatgacaat aggaggcaga	420
aggagcaggc aaatccaagt cctttcttgt agtttccttg tttggggagg aaaagttgag	480

342-3PCT.ST25.txt

ttttactatt	atggaaaaga	aacaggaaat	agagacagac	aaagagatat	gacaatacag	540
tcctgccacc	cagatactca	tttccaccta	ccattccatg	cattttgtttt	gaatatataa	600
gtatgtacat	aaaggtaggt	actctcaagt	ccatcagggc	ttggctgtcc	actgtttttg	660
aagttccaga	atgtttttgc	taagttgagg	aaataccaaa	tcaggactat	gaaaattatg	720
gtatatattg	atgtgtcaca	gaacacagat	gtgacataat	aaagatgtgt	aagattatat	780
atataacttg	tgtgtacacc	tacctcatct	ggggataaca	cctcaagttt	aattttgagg	840
cttgggtcaa	tcgtgcttcc	cttccctttc	ataggctctc	tatgagatat	tgtcatagat	900
tccatgttat	gcaatagcca	tagaatatga	catctctcta	tgataattct	atattacttt	960
aattgctgca	cagaagttca	ttgtatgtaa	gtgccacagt	atattataga	tcttcttgtg	1020
ggacatctat	ttctagttta	tgtgatagta	tagcactttc	atgaatgttc	ttgtacttga	1080
tctttacaca	ttttcttttt	tccttaggat	gaattctgag	agatgtaatt	gatggggcaa	1140
aatgtactca	ctgtttgagg	tttgaaattt	ttccatcaaa	agctggtact	cttgggtttt	1200
taagacaaag	agcaaatcct	cccctgccag	gattgacttt	tggctctttt	ttttcaaacc	1260
tcactgcttt	ttggtttagt	tgtcataaaa	tgccaagcac	catgaacagg	gctccatgaa	1320
ggggctcaga	ggtaggaggg	ctgtgattag	gagaaggctt	ggactgatgg	gcaatttgag	1380
tgctcagaat	tagagtgagg	gggtgggggt	gctgcaggga	cagatgctgg	ggaaagacac	1440
cctgaagggc	aaagggagca	acaatggctg	cagtacatgt	ggcctttcag	ctagcgcaga	1500
ggatggaaac	cagagtgggc	tgatgattgg	atgccaggcc	tgagccagca	actgtgatcc	1560
tgagctgtgc	acacttctgg	ttgggattat	ttctggtttc	tacttcctgt	ttgaagatgt	1620
ggcatggaga	gtgctctgct	ttgacctgaa	gtattttatc	tatcctcagt	ctcaggacac	1680
tgttgatgga	attaaggcca	agcacatctg	caaaaaagac	attgctggag	gaggtgcaaa	1740
gagctggaaa	ccaagtctcc	agtcctggga	aaagcagtg	tatggaaaag	caatggaaaag	1800
agcattttga	aaatgccatt	ccactgtttt	ctggccttta	tgatttctgc	tgagaaatcc	1860
actgttagtc	tgatggggtc	tccttcatag	caccaatgac	ctgaagagcc	ttgttgaagg	1920
aagactccat	ctgatgactc	agagcaag				1948

<210> 40

<211> 1406

<212> DNA

<213> Homo sapiens

<400> 40

cggtgagagg	ggcgcgcagc	agcagctcct	caacgccgca	acgcgccggc	ccaactgcag	60
gaaggtctgt	gctctggagc	cagggtaa	ggttataaaa	ttatacacca	tggccctcct	120
aaagacactc	taggaaaacc	atgtcatcct	gatcttaaaa	cacctgcaag	aaagagcaca	180

342-3PCT.ST25.txt

```

gtacttcacc attaataaag tagatatattc atcctgctca gaaaaccaac atttccagca 240
atggcttttac taccggtggt gtttctggtt actgtgctgc ttccatcttt acctgcagaa 300
ggaaaggatc ccgcttttac tgctttgtta accacccagt tgcaagtgca aaggagatt 360
gtaaataaac acaatgaact aaggaaagca gtctctccac ctgccagtaa catgctaaag 420
atggaatgga gcagagaggt aacaacgaat gccc aaagggt gggcaaaca gtgcacttta 480
caacatagtg atccagagga ccgcaaaacc agtacaagat gtggtgagaa tctctatatg 540
tcaagtgacc ctacttcctg gtcttctgca atccaaagct ggtatgacga gatcctagat 600
tttgtctatg gtgtaggacc aaagagtccc aatgcagttg ttggacatta tactcagctt 660
gtttggtact cgacttacca ggtaggctgt ggaattgcct actgtcccaa tcaagatagt 720
ctaaaatact actatgtttg ccaatattgt cctgctggta ataatatgaa tagaaagaat 780
accccgatc aacaaggaac acctgtgcc ggttgccctg atgactgtga caaaggacta 840
tgcaccaata gttgccagta tcaagatctc ctaagtaact gtgattcctt gaagaataca 900
gctggctgtg aacatgagtt actcaaggaa aagtgcagg ctacttgcct atgtgagaac 960
aaaatttact gatttaccta gtgagcattg tgcaagactg catggataag ggctgcatca 1020
tttaattgctg acataccagt ggaaattgta tgtatgttag tgacaaattt gatttcaaag 1080
agcaatgcat cttctcccc agatcatcac agaaatcact ttcaggcaat gatttacaaa 1140
agtagcatag tagatgatga caactgtgaa ctctgacata aatttagtgc ttataacga 1200
actgaatcag gttgaggatt ttgaaaactg tataaccata ggatttaggt cactaggact 1260
ttggatcaaa atggtgcatt acgtatttcc tgaaacatgc taaagaagaa gactgtaaca 1320
tcattgccat tcctactacc tgagttttta cttgcataaa caataaattc aaagctttac 1380
atctgcaaaa aaaaaaaaaa aaaaaa 1406

```

<210> 41

<211> 243

<212> PRT

<213> Homo sapiens

<400> 41

```

Met Ala Leu Leu Pro Val Leu Phe Leu Val Thr Val Leu Leu Pro Ser
1           5           10          15

```

```

Leu Pro Ala Glu Gly Lys Asp Pro Ala Phe Thr Ala Leu Leu Thr Thr
20          25          30

```

```

Gln Leu Gln Val Gln Arg Glu Ile Val Asn Lys His Asn Glu Leu Arg
35          40          45

```

342-3PCT.ST25.txt

Lys Ala Val Ser Pro Pro Ala Ser Asn Met Leu Lys Met Glu Trp Ser
 50 55 60
 Arg Glu Val Thr Thr Asn Ala Gln Arg Trp Ala Asn Lys Cys Thr Leu
 65 70 75 80
 Gln His Ser Asp Pro Glu Asp Arg Lys Thr Ser Thr Arg Cys Gly Glu
 85 90 95
 Asn Leu Tyr Met Ser Ser Asp Pro Thr Ser Trp Ser Ser Ala Ile Gln
 100 105 110
 Ser Trp Tyr Asp Glu Ile Leu Asp Phe Val Tyr Gly Val Gly Pro Lys
 115 120 125
 Ser Pro Asn Ala Val Val Gly His Tyr Thr Gln Leu Val Trp Tyr Ser
 130 135 140
 Thr Tyr Gln Val Gly Cys Gly Ile Ala Tyr Cys Pro Asn Gln Asp Ser
 145 150 155 160
 Leu Lys Tyr Tyr Tyr Val Cys Gln Tyr Cys Pro Ala Gly Asn Asn Met
 165 170 175
 Asn Arg Lys Asn Thr Pro Tyr Gln Gln Gly Thr Pro Cys Ala Gly Cys
 180 185 190
 Pro Asp Asp Cys Asp Lys Gly Leu Cys Thr Asn Ser Cys Gln Tyr Gln
 195 200 205
 Asp Leu Leu Ser Asn Cys Asp Ser Leu Lys Asn Thr Ala Gly Cys Glu
 210 215 220
 His Glu Leu Leu Lys Glu Lys Cys Lys Ala Thr Cys Leu Cys Glu Asn
 225 230 235 240

Lys Ile Tyr

<210> 42

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of the artificial sequence: oligonucleotide

<400> 42

tctagcactg tctcgatcaa g

21

<210> 43

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of the artificial sequence: Oligonucleotide

<400> 43

tgtcctcttg gtacatctga c

21

<210> 44

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of the artificial sequence: Oligonucleotide

<400> 44

ctgtgtcagc atccaaggag c

21

<210> 45

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of the artificial sequence: Oligonucleotide

<400> 45

ttcacctttg ccagcatgta g

21

<210> 46

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of the artificial sequence: Oligonucleotide

<400> 46
cttgctctga gtcacatgat g 21

<210> 47

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of the artificial sequence: oligonucleotide

<400> 47
cacagaatat gagccataca g 21

<210> 48

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of the artificial sequence: oligonucleotide

<400> 48
ggtgtcactt ctgtgccttc ct 22

<210> 49

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of the artificial sequence: oligonucleotide

<400> 49
cggcaccagt tccaacaata g 21

<210> 50

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of the artificial sequence: oligonucleotide

<400> 50
caaaggttct ccaaatgt 18

<210> 51

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of the artificial sequence: Oligonucleotide

<400> 51
tagcgctca actgtcgttg g 21

<210> 52

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of the artificial sequence: Oligonucleotide

<400> 52
cgtgagcgct tcgagatggt ccg 23

<210> 53

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of the artificial sequence: Oligonucleotide

<400> 53
cctaaccagc tgccaactg tag 23

<210> 54

<211> 1550

<212> DNA

<213> Homo sapiens

<400> 54

342-3PCT.ST25.txt

atgaatgaaa	gtcctgatcc	gactgacctg	gcgggagtca	tcattgagct	cggccccaat	60
gacagtccac	agacaagtga	atttaaagga	gcaaccgagg	aggcacctgc	gaaagaaagc	120
ccacacacaa	gtgaatttaa	aggagcagcc	cgggtgtcac	ctatcagtga	aagtgtgtta	180
gcacgacttt	ccaagtttga	agttgaagat	gctgaaaatg	ttgcttcata	tgacagcaag	240
attaagaaaa	ttgtgcattc	aattgtatca	tcctttgcat	ttggactatt	tggagttttc	300
ctggctttac	tggatgtcac	tctcatcctt	gccgacctaa	ttttcactga	cagcaaactt	360
tatattcctt	tggagtatcg	ttctatttct	ctagctattg	ccttattttt	tctcatggat	420
gttcttcttc	gagtatttgt	agaaaggaga	cagcagtatt	tttctgactt	atttaacatt	480
ttagatactg	ccattattgt	gattcttctg	ctggttgatg	tcgtttacat	tttttttgac	540
attaagttgc	ttaggaatat	tcccagatgg	acacatttac	ttcgacttct	acgacttatt	600
attctgttaa	gaatttttca	tctgtttcat	caaaaaagac	aacttgaaaa	gctgataaga	660
aggcggttt	cagaaaacaa	aaggcgatac	acaagggatg	gatttgacct	agacctcact	720
tacgttacag	aacgtattat	tgctatgtca	tttccatctt	ctggaaggca	gtctttctat	780
agaaatccaa	tcaagggaagt	tgtgcggttt	ctagataaga	aacaccgaaa	ccactatcga	840
gtctacaatc	tatgcagtga	aagagcttac	gacctaagc	acttccataa	tagggtcggt	900
agaatcatga	ttgatgatca	taatgtcccc	actctacatc	agatggtggt	tttcaccaag	960
gaagtaaagt	agtggatggc	tcaagatctt	gaaaacatcg	tagcgattca	ctgtaaagga	1020
ggcacagata	gaacaggaac	tatggtttgt	gccttcctta	ttgcctctga	aatatgttca	1080
actgcaaagg	aaagcctgta	ttatttttga	gaaaggcgaa	cagataaaac	ccacagcgaa	1140
aaatttcagg	gagtagaaac	tccttctcag	gttatgtacg	tgatctaaaa	atccaaatag	1200
aaatggagaa	aaaggttgtc	ttttccacta	tttcattagg	aaaatgttcg	gtacttgata	1260
acattacaac	agacaaaata	ttaattgatg	tattcgacgg	tccacctctg	tatgatgatg	1320
tgaaagtgca	gtttttctat	tcgaatcttc	ctacatacta	tgacaattgc	tcattttact	1380
tctggttgca	cacatctttt	attgaaaata	acaggcttta	tctaccaaaa	aatgaattgg	1440
ataatctaca	taaacaaaaa	gcacggagaa	tttatccatc	agattttgcc	gtggagatac	1500
tttttggcga	gaaaatgact	tccagtgatg	ttgtagctgg	atccgattaa		1550

<210> 55

<211> 1407

<212> DNA

<213> Homo sapiens

<400> 55

atgaatgaaa	gtcctgatcc	gactgacctg	gcgggagtca	tcattgagct	cggccccaat	60
gacagtccac	agacaagtga	atttaaagga	gcaaccgagg	aggcacctgc	gaaagaaagc	120

342-3PCT.ST25.txt

```

ccacacacaa gtgaatttaa aggagcagcc cgggtgtcac ctatcagtga aagtgtgtta 180
gcacgacttt ccaagtttga agttgaagat gctgaaaatg ttgcttcata tgacagcaag 240
attaagaaaa ttgtgcattc aattgtatca tcctttgcat ttggactatt tggagttttc 300
ctggtcttac tggatgtcac tctcatcctt gccgacctaa ttttactga cagcaaactt 360
tatattcctt tggagtatcg ttctatttct ctagctattg ccttattttt tctcatggat 420
gttctttctt gagtatttgt agaaaggaga cagcagtatt tttctgactt atttaacatt 480
ttagatactg ccattattgt gattcttctg ctggttgatg tcggtttacat ttttttgac 540
attaagttgc ttaggaatat tcccagatgg acacatttac ttcgacttct acgacttatt 600
attctgttaa gaatttttca tctgtttcat caaaaaagac aacttgaaaa gctgataaga 660
aggcgggttt cagaaaacaa aaggcgatac acaagggatg gatttgacct agacctcact 720
tacgttacag aacgtattat tgctatgtca tttccatcct ctggaaggca gtctttctat 780
agaaatccaa tcaaggaagt tgtgcgggtt ctagataaga aacaccgaaa ccactatcga 840
gtctacaatc tatgcagtga aagagcttac gatcctaagc acttccataa tagggtcggt 900
agaatcatga ttgatgatca taatgtcccc actctacatc agatgggtgg tttcaccaag 960
gaagtaaatg agtggatggc tcaagatcct gaaaacatcg tagcgattca ctgtaaagga 1020
ggcacagggt atgtacgtga tctaaaaatc caaatagaaa tggagaaaaa ggttgtcttt 1080
tccactattt cattaggaaa atgttcggtc cttgataaca ttacaacaga caaatatta 1140
attgatgtat tcgacggtcc acctctgtat gatgatgtga aagtgcagtt tttctattcg 1200
aatcttccta catactatga caattgctca ttttacttct ggttgcacac atcttttatt 1260
gaaaataaca ggctttatct accaaaaaat gaattggata atctacataa acaaaaagca 1320
cggagaatth atccatcaga ttttgccgtg gagatacttt ttggcgagaa aatgacttcc 1380
agtgatgttg tagctggatc cgattaa 1407

```

<210> 56

<211> 1413

<212> DNA

<213> Homo sapiens

<400> 56

```

atgaatgaaa gtcctgatcc gactgacctg gcgggagtc tcatagagct cggccccaat 60
gacagtccac agacaagtga atttaaagga gcaaccgagg aggcacctgc gaaagaaagt 120
gtgttagcac gactttccaa gtttgaagtt gaagatgctg aaaatgttgc ttcatatgac 180
agcaagatta agaaaattgt gcattcaatt gtatcatcct ttgcatttgg actatttggg 240
gttttcctgg tcttactgga tgtcactctc atccttgccg acctaatttt cactgacagc 300

```

342-3PCT.ST25.txt

aaactttata	ttcctttgga	gtatcgttct	atttctctag	ctattgcctt	atTTTTtctc	360
atggatgttc	ttcttcgagt	atttgtagaa	aggagacagc	agtatttttc	tgacttattt	420
aacatttttag	atactgccat	tattgtgatt	cttctgctgg	ttgatgtcgt	ttacattttt	480
tttgacatta	agttgcttag	gaatattccc	agatggacac	atttacttcg	acttctacga	540
cttattattc	tgTTaagaat	ttttcatctg	tttcatcaaa	aaagacaact	tgaaaagctg	600
ataagaaggc	gggtttcaga	aaacaaaagg	cgatacacia	gggatggatt	tgacctagac	660
ctcacttacg	ttacagaacg	tattattgct	atgtcatttc	catcttctgg	aaggcagtct	720
ttctatagaa	atccaatcaa	ggaagttgtg	cggtttctag	ataagaaaca	ccgaaaccac	780
tatcgagtct	acaatctatg	cagtgaagaa	gcttacgata	ctaagcactt	ccataatagg	840
gtcgttagaa	tcatgattga	tgatcataat	gtccccactc	tacatcagat	ggtggTTTTc	900
accaaggaag	taaatgagtg	gatggctcaa	gatcttgaaa	acatcgtagc	gattcactgt	960
aaaggaggca	cagatagaac	aggaactatg	gtttgtgcct	tccttattgc	ctctgaaata	1020
tgttcaactg	caaaggaaag	cctgtattat	tttgagaaaa	ggcgaacaga	taaaaccac	1080
agcgaaaaat	ttcagggagt	agaaactcct	tctgtacttg	ataacattac	aacagacaaa	1140
atattaattg	atgtattcga	cggtccacct	ctgtatgatg	atgtgaaagt	gcagtTTTTc	1200
tattcgaatc	ttcctacata	ctatgacaat	tgctcatttt	acttctgggt	gcacacatct	1260
tttattgaaa	ataacaggct	ttatctacca	aaaaatgaat	tggataatct	acataaacia	1320
aaagcacgga	gaatttatcc	atcagatttt	gccgtggaga	tactTTTTtg	cgagaaaatg	1380
acttccagtg	atgttgtagc	tggtatccgat	taa			1413

<210> 57

<211> 1353

<212> DNA

<213> Homo sapiens

<400> 57

atgaatgaaa	gtcctgatcc	gactgacctg	gcgggagtca	tcattgagct	cggccccaat	60
gacagtccac	agacaagtga	atttaaagga	gcaaccgagg	aggcacctgc	gaaagaaagt	120
gtgttagcac	gactttccaa	gtttgaagtt	gaagatgctg	aaaatgttgc	ttcatatgac	180
agcaagatta	agaaaattgt	gcattcaatt	gtatcatcct	ttgcatttgg	actatttggg	240
gttttcctgg	tcttactgga	tgtcactctc	atccttgccg	acctaatttt	cactgacagc	300
aaactttata	ttcctttgga	gtatcgttct	atttctctag	ctattgcctt	atTTTTtctc	360
atggatgttc	ttcttcgagt	atttgtagaa	aggagacagc	agtatttttc	tgacttattt	420
aacatttttag	atactgccat	tattgtgatt	cttctgctgg	ttgatgtcgt	ttacattttt	480
tttgacatta	agttgcttag	gaatattccc	agatggacac	atttacttcg	acttctacga	540

342-3PCT.ST25.txt

```

cttattattc tgtaagaat ttttcatctg tttcatcaaa aaagacaact tgaaaagctg      600
ataagaaggc gggtttcaga aaacaaaagg cgatacaciaa gggatggatt tgacctagac      660
ctcacttacg ttacagaacg tattattgct atgtcatttc catcttctgg aaggcagtct      720
ttctatagaa atccaatcaa ggaagttgtg cggtttctag ataagaaaca ccgaaaccac      780
tatcgagtct acaatctatg cagtgaaga gcttacgatt ctaagcactt ccataatagg      840
gtcgttagaa tcatgattga tgatcataat gtcccccactc tacatcagat ggtgggttttc      900
accaaggaag taaatgagtg gatggctcaa gatcttgaaa acatcgtagc gattcactgt      960
aaaggaggca caggttatgt acgtgatcta aaaatccaaa tagaaatgga gaaaaagggt      1020
gtctttttcca ctatttcatt aggaaaatgt tcggtacttg ataacattac aacagacaaa      1080
atattaattg atgtattcga cgggccacct ctgtatgatg atgtgaaagt gcagtttttc      1140
tattcgaatc ttcctacata ctatgacaat tgctcatttt acttctgggt gcacacatct      1200
tttattgaaa ataacaggct ttatctacca aaaaatgaat tggataatct acataaacia      1260
aaagcacgga gaatttatcc atcagatttt gccgtggaga tactttttgg cgagaaaatg      1320
acttccagtg atgttgtagc tggatccgat taa                                     1353

```

<210> 58

<211> 395

<212> PRT

<213> Homo sapiens

<400> 58

```

Met Asn Glu Ser Pro Asp Pro Thr Asp Leu Ala Gly Val Ile Ile Glu
1          5          10          15

```

```

Leu Gly Pro Asn Asp Ser Pro Gln Thr Ser Glu Phe Lys Gly Ala Thr
          20          25          30

```

```

Glu Glu Ala Pro Ala Lys Glu Ser Pro His Thr Ser Glu Phe Lys Gly
          35          40          45

```

```

Ala Ala Arg Val Ser Pro Ile Ser Glu Ser Val Leu Ala Arg Leu Ser
          50          55          60

```

```

Lys Phe Glu Val Glu Asp Ala Glu Asn Val Ala Ser Tyr Asp Ser Lys
65          70          75          80

```

```

Ile Lys Lys Ile Val His Ser Ile Val Ser Ser Phe Ala Phe Gly Leu
          85          90          95

```

```

Phe Gly Val Phe Leu Val Leu Leu Asp Val Thr Leu Ile Leu Ala Asp

```

Leu Ile Phe Thr Asp Ser Lys Leu Tyr Ile Pro Leu Glu Tyr Arg Ser
 115 120 125
 Ile Ser Leu Ala Ile Ala Leu Phe Phe Leu Met Asp Val Leu Leu Arg
 130 135 140
 Val Phe Val Glu Arg Arg Gln Gln Tyr Phe Ser Asp Leu Phe Asn Ile
 145 150 155 160
 Leu Asp Thr Ala Ile Ile Val Ile Leu Leu Val Asp Val Val Tyr
 165 170 175
 Ile Phe Phe Asp Ile Lys Leu Leu Arg Asn Ile Pro Arg Trp Thr His
 180 185 190
 Leu Leu Arg Leu Leu Arg Leu Ile Ile Leu Leu Arg Ile Phe His Leu
 195 200 205
 Phe His Gln Lys Arg Gln Leu Glu Lys Leu Ile Arg Arg Arg Val Ser
 210 215 220
 Glu Asn Lys Arg Arg Tyr Thr Arg Asp Gly Phe Asp Leu Asp Leu Thr
 225 230 235 240
 Tyr Val Thr Glu Arg Ile Ile Ala Met Ser Phe Pro Ser Ser Gly Arg
 245 250 255
 Gln Ser Phe Tyr Arg Asn Pro Ile Lys Glu Val Val Arg Phe Leu Asp
 260 265 270
 Lys Lys His Arg Asn His Tyr Arg Val Tyr Asn Leu Cys Ser Glu Arg
 275 280 285
 Ala Tyr Asp Pro Lys His Phe His Asn Arg Val Val Arg Ile Met Ile
 290 295 300
 Asp Asp His Asn Val Pro Thr Leu His Gln Met Val Val Phe Thr Lys
 305 310 315 320
 Glu Val Asn Glu Trp Met Ala Gln Asp Leu Glu Asn Ile Val Ala Ile
 325 330 335
 His Cys Lys Gly Gly Thr Asp Arg Thr Gly Thr Met Val Cys Ala Phe
 340 345 350
 Leu Ile Ala Ser Glu Ile Cys Ser Thr Ala Lys Glu Ser Leu Tyr Tyr
 355 360 365

Phe Gly Glu Arg Arg Thr Asp Lys Thr His Ser Glu Lys Phe Gln Gly
 370 375 380

Val Glu Thr Pro Ser Gln Val Met Tyr Val Ile
 385 390 395

<210> 59

<211> 468

<212> PRT

<213> Homo sapiens

<400> 59

Met Asn Glu Ser Pro Asp Pro Thr Asp Leu Ala Gly Val Ile Ile Glu
 1 5 10 15

Leu Gly Pro Asn Asp Ser Pro Gln Thr Ser Glu Phe Lys Gly Ala Thr
 20 25 30

Glu Glu Ala Pro Ala Lys Glu Ser Pro His Thr Ser Glu Phe Lys Gly
 35 40 45

Ala Ala Arg Val Ser Pro Ile Ser Glu Ser Val Leu Ala Arg Leu Ser
 50 55 60

Lys Phe Glu Val Glu Asp Ala Glu Asn Val Ala Ser Tyr Asp Ser Lys
 65 70 75 80

Ile Lys Lys Ile Val His Ser Ile Val Ser Ser Phe Ala Phe Gly Leu
 85 90 95

Phe Gly Val Phe Leu Val Leu Leu Asp Val Thr Leu Ile Leu Ala Asp
 100 105 110

Leu Ile Phe Thr Asp Ser Lys Leu Tyr Ile Pro Leu Glu Tyr Arg Ser
 115 120 125

Ile Ser Leu Ala Ile Ala Leu Phe Phe Leu Met Asp Val Leu Leu Arg
 130 135 140

Val Phe Val Glu Arg Arg Gln Gln Tyr Phe Ser Asp Leu Phe Asn Ile
 145 150 155 160

Leu Asp Thr Ala Ile Ile Val Ile Leu Leu Val Asp Val Val Tyr
 165 170 175

Ile Phe Phe Asp Ile Lys Leu Leu Arg Asn Ile Pro Arg Trp Thr His
 180 185 190

342-3PCT.ST25.txt

Leu Leu Arg 195 Leu Leu Arg Leu Ile 200 Ile Leu Leu Arg Ile 205 Phe His Leu
 Phe His 210 Gln Lys Arg Gln 215 Glu Lys Leu Ile Arg 220 Arg Arg Val Ser
 Glu 225 Asn Lys Arg Arg Tyr 230 Thr Arg Asp Gly Phe 235 Asp Leu Asp Leu Thr 240
 Tyr Val Thr Glu Arg 245 Ile Ile Ala Met Ser 250 Phe Pro Ser Ser Gly 255 Arg
 Gln Ser Phe Tyr 260 Arg Asn Pro Ile Lys 265 Glu Val Val Arg Phe 270 Leu Asp
 Lys Lys His 275 Arg Asn His Tyr Arg 280 Val Tyr Asn Leu Cys 285 Ser Glu Arg
 Ala Tyr 290 Asp Pro Lys His Phe 295 His Asn Arg Val Val 300 Arg Ile Met Ile
 Asp 305 Asp His Asn Val Pro 310 Thr Leu His Gln Met 315 Val Val Phe Thr Lys 320
 Glu Val Asn Glu Trp 325 Met Ala Gln Asp Leu 330 Glu Asn Ile Val Ala 335 Ile
 His Cys Lys Gly 340 Gly Thr Gly Tyr Val 345 Arg Asp Leu Lys Ile 350 Gln Ile
 Glu Met Glu 355 Lys Lys Val Val Phe 360 Ser Thr Ile Ser Leu 365 Gly Lys Cys
 Ser Val 370 Leu Asp Asn Ile Thr 375 Thr Asp Lys Ile Leu 380 Ile Asp Val Phe
 Asp 385 Gly Pro Pro Leu Tyr 390 Asp Asp Val Lys Val 395 Gln Phe Phe Tyr Ser 400
 Asn Leu Pro Thr Tyr 405 Tyr Asp Asn Cys Ser 410 Phe Tyr Phe Trp Leu 415 His
 Thr Ser Phe Ile 420 Glu Asn Asn Arg Leu 425 Tyr Leu Pro Lys Asn 430 Glu Leu
 Asp Asn Leu 435 His Lys Gln Lys Ala 440 Arg Arg Ile Tyr Pro 445 Ser Asp Phe
 Ala Val 450 Glu Ile Leu Phe Gly 455 Glu Lys Met Thr Ser 460 Ser Asp Val Val

Ala Gly Ser Asp
465

<210> 60

<211> 470

<212> PRT

<213> Homo sapiens

<400> 60

Met Asn Glu Ser Pro Asp Pro Thr Asp Leu Ala Gly Val Ile Ile Glu
1 5 10 15

Leu Gly Pro Asn Asp Ser Pro Gln Thr Ser Glu Phe Lys Gly Ala Thr
20 25 30

Glu Glu Ala Pro Ala Lys Glu Ser Val Leu Ala Arg Leu Ser Lys Phe
35 40 45

Glu Val Glu Asp Ala Glu Asn Val Ala Ser Tyr Asp Ser Lys Ile Lys
50 55 60

Lys Ile Val His Ser Ile Val Ser Ser Phe Ala Phe Gly Leu Phe Gly
65 70 75 80

Val Phe Leu Val Leu Leu Asp Val Thr Leu Ile Leu Ala Asp Leu Ile
85 90 95

Phe Thr Asp Ser Lys Leu Tyr Ile Pro Leu Glu Tyr Arg Ser Ile Ser
100 105 110

Leu Ala Ile Ala Leu Phe Phe Leu Met Asp Val Leu Leu Arg Val Phe
115 120 125

Val Glu Arg Arg Gln Gln Tyr Phe Ser Asp Leu Phe Asn Ile Leu Asp
130 135 140

Thr Ala Ile Ile Val Ile Leu Leu Leu Val Asp Val Val Tyr Ile Phe
145 150 155 160

Phe Asp Ile Lys Leu Leu Arg Asn Ile Pro Arg Trp Thr His Leu Leu
165 170 175

Arg Leu Leu Arg Leu Ile Ile Leu Leu Arg Ile Phe His Leu Phe His
180 185 190

Gln Lys Arg Gln Leu Glu Lys Leu Ile Arg Arg Arg Val Ser Glu Asn
Page 53

195

342-3PCT.ST25.txt
200 205

Lys Arg Arg Tyr Thr Arg Asp Gly Phe Asp Leu Asp Leu Thr Tyr Val
 210 215 220
 Thr Glu Arg Ile Ile Ala Met Ser Phe Pro Ser Ser Gly Arg Gln Ser
 225 230 235 240
 Phe Tyr Arg Asn Pro Ile Lys Glu Val Val Arg Phe Leu Asp Lys Lys
 245 250 255
 His Arg Asn His Tyr Arg Val Tyr Asn Leu Cys Ser Glu Arg Ala Tyr
 260 265 270
 Asp Pro Lys His Phe His Asn Arg Val Val Arg Ile Met Ile Asp Asp
 275 280 285
 His Asn Val Pro Thr Leu His Gln Met Val Val Phe Thr Lys Glu Val
 290 295 300
 Asn Glu Trp Met Ala Gln Asp Leu Glu Asn Ile Val Ala Ile His Cys
 305 310 315 320
 Lys Gly Gly Thr Asp Arg Thr Gly Thr Met Val Cys Ala Phe Leu Ile
 325 330 335
 Ala Ser Glu Ile Cys Ser Thr Ala Lys Glu Ser Leu Tyr Tyr Phe Gly
 340 345 350
 Glu Arg Arg Thr Asp Lys Thr His Ser Glu Lys Phe Gln Gly Val Glu
 355 360 365
 Thr Pro Ser Val Leu Asp Asn Ile Thr Thr Asp Lys Ile Leu Ile Asp
 370 375 380
 Val Phe Asp Gly Pro Pro Leu Tyr Asp Asp Val Lys Val Gln Phe Phe
 385 390 395 400
 Tyr Ser Asn Leu Pro Thr Tyr Tyr Asp Asn Cys Ser Phe Tyr Phe Trp
 405 410 415
 Leu His Thr Ser Phe Ile Glu Asn Asn Arg Leu Tyr Leu Pro Lys Asn
 420 425 430
 Glu Leu Asp Asn Leu His Lys Gln Lys Ala Arg Arg Ile Tyr Pro Ser
 435 440 445
 Asp Phe Ala Val Glu Ile Leu Phe Gly Glu Lys Met Thr Ser Ser Asp
 450 455 460

Val Val Ala Gly Ser Asp
465 470

<210> 61

<211> 450

<212> PRT

<213> Homo sapiens .

<400> 61

Met Asn Glu Ser Pro Asp Pro Thr Asp Leu Ala Gly Val Ile Ile Glu
1 5 10 15

Leu Gly Pro Asn Asp Ser Pro Gln Thr Ser Glu Phe Lys Gly Ala Thr
20 25 30

Glu Glu Ala Pro Ala Lys Glu Ser Val Leu Ala Arg Leu Ser Lys Phe
35 40 45

Glu Val Glu Asp Ala Glu Asn Val Ala Ser Tyr Asp Ser Lys Ile Lys
50 55 60

Lys Ile Val His Ser Ile Val Ser Ser Phe Ala Phe Gly Leu Phe Gly
65 70 75 80

Val Phe Leu Val Leu Leu Asp Val Thr Leu Ile Leu Ala Asp Leu Ile
85 90 95

Phe Thr Asp Ser Lys Leu Tyr Ile Pro Leu Glu Tyr Arg Ser Ile Ser
100 105 110

Leu Ala Ile Ala Leu Phe Phe Leu Met Asp Val Leu Leu Arg Val Phe
115 120 125

Val Glu Arg Arg Gln Gln Tyr Phe Ser Asp Leu Phe Asn Ile Leu Asp
130 135 140

Thr Ala Ile Ile Val Ile Leu Leu Leu Val Asp Val Val Tyr Ile Phe
145 150 155 160

Phe Asp Ile Lys Leu Leu Arg Asn Ile Pro Arg Trp Thr His Leu Leu
165 170 175

Arg Leu Leu Arg Leu Ile Ile Leu Leu Arg Ile Phe His Leu Phe His
180 185 190

Gln Lys Arg Gln Leu Glu Lys Leu Ile Arg Arg Arg Val Ser Glu Asn
195 200 205

342-3PCT.ST25.txt

Lys Arg Arg Tyr Thr Arg Asp Gly Phe Asp Leu Asp Leu Thr Tyr Val
 210 215 220
 Thr Glu Arg Ile Ile Ala Met Ser Phe Pro Ser Ser Gly Arg Gln Ser
 225 230 235 240
 Phe Tyr Arg Asn Pro Ile Lys Glu Val Val Arg Phe Leu Asp Lys Lys
 245 250 255
 His Arg Asn His Tyr Arg Val Tyr Asn Leu Cys Ser Glu Arg Ala Tyr
 260 265 270
 Asp Pro Lys His Phe His Asn Arg Val Val Arg Ile Met Ile Asp Asp
 275 280 285
 His Asn Val Pro Thr Leu His Gln Met Val Val Phe Thr Lys Glu Val
 290 295 300
 Asn Glu Trp Met Ala Gln Asp Leu Glu Asn Ile Val Ala Ile His Cys
 305 310 315 320
 Lys Gly Gly Thr Gly Tyr Val Arg Asp Leu Lys Ile Gln Ile Glu Met
 325 330 335
 Glu Lys Lys Val Val Phe Ser Thr Ile Ser Leu Gly Lys Cys Ser Val
 340 345 350
 Leu Asp Asn Ile Thr Thr Asp Lys Ile Leu Ile Asp Val Phe Asp Gly
 355 360 365
 Pro Pro Leu Tyr Asp Asp Val Lys Val Gln Phe Phe Tyr Ser Asn Leu
 370 375 380
 Pro Thr Tyr Tyr Asp Asn Cys Ser Phe Tyr Phe Trp Leu His Thr Ser
 385 390 395 400
 Phe Ile Glu Asn Asn Arg Leu Tyr Leu Pro Lys Asn Glu Leu Asp Asn
 405 410 415
 Leu His Lys Gln Lys Ala Arg Arg Ile Tyr Pro Ser Asp Phe Ala Val
 420 425 430
 Glu Ile Leu Phe Gly Glu Lys Met Thr Ser Ser Asp Val Val Ala Gly
 435 440 445
 Ser Asp
 450

<210> 62

<211> 1299

<212> DNA

<213> Homo sapiens

```

<400> 62
cgcccttaga catggctcag atgtgcagcc acagtgagct tctgaacatt tcttctcaga    60
ctaagctctt acacacagtt gcagttgaaa gaaagaattg cttgacatgg ccacaggagc    120
aggcagcttc ctgcagacat gacagtcaac gcaaaactcat gtcactgtgg gcagacacat    180
gtttgcaaag agactcagag ccaaacaagc acaactcaatg tgctttgccc aaattttaccc    240
attaggtaaa tcttcctcc tccaagaag aaagtggaga gagcatgagt cctcacatgg    300
gaacttgaag tcagggaat gaaggctcac caattatttg tgcattgggt taagttttcc    360
ttgaaattaa gttcaggttt gtctttgtgt gtaccaatta atgacaagag gttagataga    420
agtatgctag atggcaaaga gaaatatgtt ttgtgtcttc aattttgcta aaaataaccc    480
agaacatgga taattcattt attaattgat tttggttaagc caagtcctat ttggagaaaa    540
ttaatagttt ttctaaaaaa gaattttctc aatatcacct ggcttgataa ctttttctc    600
cttcgagttc ctttttctgg agtttaacaa acttggttctt taaaaataga ttatattgac    660
tacctctcac tgatgttatg atattagttt ctattgctta ctttgtattt ctaatttttag    720
gattcacaat ttagctggag aactattttt taacctgttg cacctaaaca tgattgagct    780
agaagacagt ttaccatat gcatgcattt tctctgagtt atattttaaa atctatacat    840
ttctcctaaa tatggaggaa atcactggca tcaaagcca gtctcagacg gaagacctaa    900
agcccatttc tggcctggag ctacttggct ttgtgacctt tggtaggca taagtgtctt    960
gagtttgtgt tgcctctttt gtaaaatgag ggtttgactt aatcagtgat tttcatagct   1020
taaaattttt ttgaagaaca gaactttttt taaaaacagt tagatgcaac catattatat   1080
aaaacagaac agatacaagt agagctaact tgctaaagaa aggatggagg ctctgaagct   1140
gtgacttcat tatcccttaa tactgctatg tcctctgtag taccttagat ttctatggga   1200
catcgtttaa aaactattgt ttatgcgaga gccttgctaa tttcctaaaa attgtggata   1260
cattttttct cccatgtata attttctcac cttctattt                               1299

```

<210> 63

<211> 405

<212> DNA

<213> Homo sapiens

```

<400> 63
gcacaaggcc tgctcttact ccaaaaagat ggacccaggt ccgaaggggc actgccactg    60

```

342-3PCT.ST25.txt

tggggggcat ggccatcctc caggtcactg cgggccaccc cctggccatg gcccagggcc 120
 ctgcggggcca cccccacca tgggtccaggg ccctgcgggc caccctctgg ccatggcca 180
 gggccctgcg ggccaccccc ccaccatggt ccagggccct gcgggcctcc ccctggccat 240
 ggcccaggtc acccaccccc tgggtccacat cactgaggaa gtagaagaaa acaggacaca 300
 agatggcaag cctgagagaa ttgccagct gacctggaat gaggcctaaa ccacaatctt 360
 ctcttcctaa taaacagcct cctagaggcc acattctatt ctgta 405

<210> 64

<211> 106

<212> PRT

<213> Homo sapiens

<400> 64

Met Asp Pro Gly Pro Lys Gly His Cys His Cys Gly Gly His Gly His
1 5 10 15

Pro Pro Gly His Cys Gly Pro Pro Pro Gly His Gly Pro Gly Pro Cys
20 25 30

Gly Pro Pro Pro Thr Met Val Gln Gly Pro Ala Gly His Pro Leu Ala
35 40 45

Met Ala Gln Gly Pro Ala Gly His Pro Pro Thr Met Val Gln Gly Pro
50 55 60

Ala Gly Leu Pro Leu Ala Met Ala Gln Val Thr His Pro Leu Val His
65 70 75 80

Ile Thr Glu Glu Val Glu Glu Asn Arg Thr Gln Asp Gly Lys Pro Glu
85 90 95

Arg Ile Ala Gln Leu Thr Trp Asn Glu Ala
100 105

<210> 65

<211> 71

<212> PRT

<213> Homo sapiens

<400> 65

Met Ala Ile Leu Gln Val Thr Ala Gly His Pro Leu Ala Met Ala Gln
1 5 10 15

Gly Pro Ala Gly His Pro Pro Pro Trp Ser Arg Ala Leu Arg Ala Thr
 20 25 30

Pro Trp Pro Trp Pro Arg Ala Leu Arg Ala Thr Pro Pro Pro Trp Ser
 35 40 45

Arg Ala Leu Arg Ala Ser Pro Trp Pro Trp Pro Arg Ser Pro Thr Pro
 50 55 60

Trp Ser Thr Ser Leu Arg Lys
 65 70

<210> 66

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of the artificial sequence: Oligonucleotide

<400> 66

agacatggct cagatgtgca g

21

<210> 67

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of the artificial sequence: oligonucleotide

<400> 67

ggaaattagc aaggctctcg c

21

<210> 68

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of the artificial sequence: Oligonucleotide

<400> 68

tcaggtattc cctgctctta c

21

<210> 69

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of the artificial sequence: Oligonucleotide

<400> 69

tgggcaattc tctcaggctt g

21

<210> 70

<211> 908

<212> DNA

<213> Homo sapiens

<400> 70

aaaattcggc acgaggccgg gctgtggtct agcataaagg cggagcccag aagaaggggc	60
ggggtatggg agaagcctcc ccacctgccc ccgcaaggcg gcatctgctg gtcctgctgc	120
tgctcctctc taccctggtg atccccctcg ctgcagctcc tatccatgat gctgacgccc	180
aagagagctc cttgggtctc acaggcctcc agagcctact ccaaggcttc agccgacttt	240
tcctgaaagg taacctgctt cggggcatag acagcttatt ctctgcccc atggacttcc	300
ggggcctccc tgggaactac cacaagagg agaaccagga gcaccagctg gggacaaca	360
ccctctccag ccacctccag atcgacaaga tgaccgacaa caagacagga gaggtgctga	420
tctccgagaa tgtggtggca tccattcaac cagcggaggg gagcttcgag ggtgatttga	480
aggtaccag gatggaggag aaggaggccc tggtagccat ccagaaggcc acggacagct	540
tccacacaga actccatccc cgggtggcct tctggatcat taagctgcca cggcggagg	600
cccaccagga tgccctggag ggcggccact ggctcagcga gaagcgacac cgctgcagg	660
ccatccggga tggactccgc aaggggaccc acaaggacgt cctagaagag gggaccgaga	720
gctcctccca ctccaggctg tcccccgaa agacccactt actgtacatc ctcaggccct	780
ctcggcagct gtaggggtgg ggaccgggga gcacctgcct gtagcccca tcagaccctg	840
ccccaagcac catatggaaa taaagtctt tcttacatct aaaaaaaaaa aaaaaaaaaa	900
aaaaaaaa	908

<210> 71

<211> 242

<212> PRT

<213> Homo sapiens

<400> 71

Met Gly Glu Ala Ser Pro Pro Ala Pro Ala Arg Arg His Leu Leu Val
 1 5 10 15
 Leu Leu Leu Leu Leu Ser Thr Leu Val Ile Pro Ser Ala Ala Ala Pro
 20 25 30
 Ile His Asp Ala Asp Ala Gln Glu Ser Ser Leu Gly Leu Thr Gly Leu
 35 40 45
 Gln Ser Leu Leu Gln Gly Phe Ser Arg Leu Phe Leu Lys Gly Asn Leu
 50 55 60
 Leu Arg Gly Ile Asp Ser Leu Phe Ser Ala Pro Met Asp Phe Arg Gly
 65 70 75 80
 Leu Pro Gly Asn Tyr His Lys Glu Glu Asn Gln Glu His Gln Leu Gly
 85 90 95
 Asn Asn Thr Leu Ser Ser His Leu Gln Ile Asp Lys Met Thr Asp Asn
 100 105 110
 Lys Thr Gly Glu Val Leu Ile Ser Glu Asn Val Val Ala Ser Ile Gln
 115 120 125
 Pro Ala Glu Gly Ser Phe Glu Gly Asp Leu Lys Val Pro Arg Met Glu
 130 135 140
 Glu Lys Glu Ala Leu Val Pro Ile Gln Lys Ala Thr Asp Ser Phe His
 145 150 155 160
 Thr Glu Leu His Pro Arg Val Ala Phe Trp Ile Ile Lys Leu Pro Arg
 165 170 175
 Arg Arg Ser His Gln Asp Ala Leu Glu Gly Gly His Trp Leu Ser Glu
 180 185 190
 Lys Arg His Arg Leu Gln Ala Ile Arg Asp Gly Leu Arg Lys Gly Thr
 195 200 205
 His Lys Asp Val Leu Glu Glu Gly Thr Glu Ser Ser Ser His Ser Arg
 210 215 220
 Leu Ser Pro Arg Lys Thr His Leu Leu Tyr Ile Leu Arg Pro Ser Arg
 225 230 235 240

Gln Leu

<210> 72

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of the artificial sequence: Oligonucleotide

<400> 72

ctcctatcca tgatgctgac g

21

<210> 73

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of the artificial sequence: Oligonucleotide

<400> 73

cctgaggatg tacagtaagt g

21

<210> 74

<211> 2987

<212> DNA

<213> Homo sapiens

<400> 74

tttcccagcg aggtgggtcat tcagagccta cacatctgtt ctgtatttta acccatggat 60

gagaatattc attcaagcca agagagttaa aactaaacat ctttgctatt gcctctacag 120

accagaaaag tatctttatg tcacatcttc ttttaaagga gcatttaaag atgaagttaa 180

aaaggcagaa gaagcagtaa agattgctga atccatattg aaagaagcac aaatcaaagt 240

aaaccagtgt gacagaacct ctttatcttc tgccaaggat gtattacaga gagctttgga 300

agatgtagaa gcaaagcaaa agaatcttaa agagaaacaa agagaattaa aaacagcaag 360

aacgctctcc ctgttctatg gagtgaacgt agaaaaccga agccaagctg gaatgttcat 420

ttacagtaat aaccgtttga tcaaaatgca tgaaaaagtg ggctcacagt tgaaactgaa 480

gtccttactt ggcgaggcg tggttggaat tgtaatatata cccttgaggg tcatggaacc 540

342-3PCT.ST25.txt

atcccataat	aaacaggaat	ttctcaatgt	ccaagagtat	aatcatctac	taaaagtc	600
gggacagtac	ttgggtccagt	actgtaagg	caccggcatc	aataatagaa	atttaacatt	660
gttttgcaat	gaatttggat	accagaatga	catcgatgtg	gagaaacctt	taaattcttt	720
tcaatatcaa	agaagacaag	ccatgggtat	cccattcatc	atacaatgtg	atctttgtct	780
taaatggaga	gtcttgcctt	cctctactaa	ttatcaggaa	aaagaatttt	ttgacatttg	840
gatttgtgct	aataatccca	accgcttgga	aaacagttgt	catcaggtag	aatgtctacc	900
ttccatccca	ctgggcacca	tgagcacaat	atcaccatca	aaaaatgaga	aagagaagca	960
acttagagag	tcgggtcataa	agtatcaaaa	tagactggca	gaacagcagc	cacagcctca	1020
atttatacca	gtggacgaaa	tactgtcac	ttccacctgc	ctaacttcag	cacataagga	1080
aaataccaaa	accagaaaa	tcaggctttt	gggcgatgac	ttgaagcatg	aatctctttc	1140
atcctttgag	ctttcagcga	gccgtagagg	acagaaaaga	aacatagaag	agacagactc	1200
tgatgtagag	tatatttcag	aaacaaaaat	tatgaaaaag	tctatggagg	agaaaatgaa	1260
ctctcaacag	cagagaattc	cagtagctct	gccagaaaat	gtcaaactag	ctgagagatc	1320
ccagagaagt	cagattgcta	atattaccac	tgtctggaga	gctcaaccaa	ctgaaggggtg	1380
cctgaagaat	gcccaggccg	cttcttgga	aatgaaaagg	aagcagagtc	tgaactttgt	1440
agaggaatgt	aagggtattga	ctgaagatga	gaacacgagt	gattcagata	taatcctggt	1500
ttcagataaa	agcaacactg	atgtttcatt	gaaacaagaa	aaaaaggaaa	ttcctctttt	1560
aaaccaagaa	aaacaggagc	tgtgcaatga	tgttctagca	atgaaaagaa	gctcttcatt	1620
acctagctgg	aaaagcttgc	tcaatgtgcc	gatggaagat	gtgaatctaa	gttctggaca	1680
catagccaga	gtttctgtga	gtggcagttg	taaagttgct	tcttcgccag	cgtctttctca	1740
aagcacacct	gtcaaggaaa	cagtgagaaa	actgaagtct	aagttaaggg	agattcttct	1800
gtattttttt	cctgagcatc	agctaccatc	agaattggaa	gaacctgcat	taagttgtga	1860
gctggagcag	tgcccagagc	agatgaacaa	aaagctgaaa	atgtgtttca	accagataca	1920
gaatacttac	atggtccaat	atgaaaaaaa	aataaagagg	aaattgcagt	ccattatcta	1980
tgattcaaat	acaagaggaa	tacataatga	aatctctctg	gggcaatgtg	aaaataaaaag	2040
aaaaatctct	gaggataagc	tgaagaatct	tcgtataaaa	ctggcactat	tgttgcagaa	2100
actccaactg	ggtggtccag	aagggtgacct	ggagcagact	gacacttatt	tagaagcttt	2160
gcttaaagaa	gataatcttc	tcttccagaa	caatttaa	aaagtaacta	tagatgcaag	2220
acatagactc	cctttagaaa	aaaatgaaaa	gacttcggaa	aattaagtca	gagatggtat	2280
taccttttaa	aaaatgctaa	taagaaaatt	ggaagattct	tttaaaaatt	tttctttttt	2340
gttggtgtta	ctgtaaagtc	tattctgttt	aacaataaga	aataagaaat	aatttttttc	2400
aaataagaaa	attgtgtact	ctagaaatgg	agaccgattt	acaatttatg	tattccctaa	2460
tccaattatc	taaatcttcc	ttttctttca	gaaatattaa	taatattctag	agttctctaa	2520

342-3PCT.ST25.txt

ttttcatgtg agctactgaa aaaaatgaaa atgtcactca agcttaactt ttgttattcc 2580
 ttaaaagatt gttattgtaa ttttgttatt ccttaaaaac atttaaaagc agattttttc 2640
 aaaatcgata tgtgaaggac tacagaatca cctcctcttg aagatattga aaaagaaaga 2700
 cattatgccc tttctccact atagccaaca ctcagtcaag cagaaaatac aaatcccccc 2760
 aaaactttga gacatagctt atataatttt attatttagt catagtaaaa gaataaatct 2820
 cctaagcata atatgtatac atattacaca tatgtaaaaa ttgttgTTTT acatttacat 2880
 atacgtaaag aagtatgttt ttacactttt cttgataagt gttttttttt tgtttagaaa 2940
 tgtctgaaac tttagacaaa aacagtaaaa catttaatat tcatttg 2987

<210> 75

<211> 735

<212> PRT

<213> Homo sapiens

<400> 75

Met Arg Ile Phe Ile Gln Ala Lys Arg Val Lys Thr Lys His Leu Cys
 1 5 10 15

Tyr Cys Leu Tyr Arg Pro Arg Lys Tyr Leu Tyr Val Thr Ser Ser Phe
 20 25 30

Lys Gly Ala Phe Lys Asp Glu Val Lys Lys Ala Glu Glu Ala Val Lys
 35 40 45

Ile Ala Glu Ser Ile Leu Lys Glu Ala Gln Ile Lys Val Asn Gln Cys
 50 55 60

Asp Arg Thr Ser Leu Ser Ser Ala Lys Asp Val Leu Gln Arg Ala Leu
 65 70 75 80

Glu Asp Val Glu Ala Lys Gln Lys Asn Leu Lys Glu Lys Gln Arg Glu
 85 90 95

Leu Lys Thr Ala Arg Thr Leu Ser Leu Phe Tyr Gly Val Asn Val Glu
 100 105 110

Asn Arg Ser Gln Ala Gly Met Phe Ile Tyr Ser Asn Asn Arg Leu Ile
 115 120 125

Lys Met His Glu Lys Val Gly Ser Gln Leu Lys Leu Lys Ser Leu Leu
 130 135 140

Gly Ala Gly Val Val Gly Ile Val Asn Ile Pro Leu Glu Val Met Glu
 145 150 155 160

342-3PCT.ST25.txt

Pro Ser His Asn Lys Gln Glu Phe Leu Asn Val Gln Glu Tyr Asn His
165 170 175

Leu Leu Lys Val Met Gly Gln Tyr Leu Val Gln Tyr Cys Lys Asp Thr
180 185 190

Gly Ile Asn Asn Arg Asn Leu Thr Leu Phe Cys Asn Glu Phe Gly Tyr
195 200 205

Gln Asn Asp Ile Asp Val Glu Lys Pro Leu Asn Ser Phe Gln Tyr Gln
210 215 220

Arg Arg Gln Ala Met Gly Ile Pro Phe Ile Ile Gln Cys Asp Leu Cys
225 230 235 240

Leu Lys Trp Arg Val Leu Pro Ser Ser Thr Asn Tyr Gln Glu Lys Glu
245 250 255

Phe Phe Asp Ile Trp Ile Cys Ala Asn Asn Pro Asn Arg Leu Glu Asn
260 265 270

Ser Cys His Gln Val Glu Cys Leu Pro Ser Ile Pro Leu Gly Thr Met
275 280 285

Ser Thr Ile Ser Pro Ser Lys Asn Glu Lys Glu Lys Gln Leu Arg Glu
290 295 300

Ser Val Ile Lys Tyr Gln Asn Arg Leu Ala Glu Gln Gln Pro Gln Pro
305 310 315 320

Gln Phe Ile Pro Val Asp Glu Ile Thr Val Thr Ser Thr Cys Leu Thr
325 330 335

Ser Ala His Lys Glu Asn Thr Lys Thr Gln Lys Ile Arg Leu Leu Gly
340 345 350

Asp Asp Leu Lys His Glu Ser Leu Ser Ser Phe Glu Leu Ser Ala Ser
355 360 365

Arg Arg Gly Gln Lys Arg Asn Ile Glu Glu Thr Asp Ser Asp Val Glu
370 375 380

Tyr Ile Ser Glu Thr Lys Ile Met Lys Lys Ser Met Glu Glu Lys Met
385 390 395 400

Asn Ser Gln Gln Gln Arg Ile Pro Val Ala Leu Pro Glu Asn Val Lys
405 410 415

Leu Ala Glu Arg Ser Gln Arg Ser Gln Ile Ala Asn Ile Thr Thr Val

Trp Arg Ala Gln Pro Thr Glu Gly Cys Leu Lys Asn Ala Gln Ala Ala
435 440 445

Ser Trp Glu Met Lys Arg Lys Gln Ser Leu Asn Phe Val Glu Glu Cys
450 455 460

Lys Val Leu Thr Glu Asp Glu Asn Thr Ser Asp Ser Asp Ile Ile Leu
465 470 475 480

Val Ser Asp Lys Ser Asn Thr Asp Val Ser Leu Lys Gln Glu Lys Lys
485 490 495

Glu Ile Pro Leu Leu Asn Gln Glu Lys Gln Glu Leu Cys Asn Asp Val
500 505 510

Leu Ala Met Lys Arg Ser Ser Ser Leu Pro Ser Trp Lys Ser Leu Leu
515 520 525

Asn Val Pro Met Glu Asp Val Asn Leu Ser Ser Gly His Ile Ala Arg
530 535 540

Val Ser Val Ser Gly Ser Cys Lys Val Ala Ser Ser Pro Ala Ser Ser
545 550 555 560

Gln Ser Thr Pro Val Lys Glu Thr Val Arg Lys Leu Lys Ser Lys Leu
565 570 575

Arg Glu Ile Leu Leu Tyr Phe Phe Pro Glu His Gln Leu Pro Ser Glu
580 585 590

Leu Glu Glu Pro Ala Leu Ser Cys Glu Leu Glu Gln Cys Pro Glu Gln
595 600 605

Met Asn Lys Lys Leu Lys Met Cys Phe Asn Gln Ile Gln Asn Thr Tyr
610 615 620

Met Val Gln Tyr Glu Lys Lys Ile Lys Arg Lys Leu Gln Ser Ile Ile
625 630 635 640

Tyr Asp Ser Asn Thr Arg Gly Ile His Asn Glu Ile Ser Leu Gly Gln
645 650 655

Cys Glu Asn Lys Arg Lys Ile Ser Glu Asp Lys Leu Lys Asn Leu Arg
660 665 670

Ile Lys Leu Ala Leu Leu Leu Gln Lys Leu Gln Leu Gly Gly Pro Glu
675 680 685



342-3PCT.ST25.txt

Gly Asp Leu Glu Gln Thr Asp Thr Tyr Leu Glu Ala Leu Leu Lys Glu
690 695 700

Asp Asn Leu Leu Phe Gln Asn Asn Leu Asn Lys Val Thr Ile Asp Ala
705 710 715 720

Arg His Arg Leu Pro Leu Glu Lys Asn Glu Lys Thr Ser Glu Asn
725 730 735

<210> 76

<211> 21

<212> DNA

<213> Artificial sequence

<220>

<223> Description of the artificial sequence: Oligonucleotide

<400> 76

ctgagtatca gctaccatca g

21

<210> 77

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of the artificial sequence: Oligonucleotide

<400> 77

tctgtagtcc ttcacatatc g

21

<210> 78

<211> 21

<212> DNA

<213> Artificial sequence

<220>

<223> Description of the artificial sequence: Oligonucleotide

<400> 78

ttttgtctat ggtgtaggac c

21

<210> 79

<211> 21

<212> DNA

<213> Artificial sequence

<220>

<223> Description of the artificial sequence: Oligonucleotide

<400> 79

ggaatggcaa tgatgttaca g

21

<210> 80

<211> 20

<212> PRT

<213> Homo sapiens

<400> 80

Met	Ser	Thr	Val	Lys	Glu	Gln	Leu	Ile	Glu	Lys	Leu	Ile	Glu	Asp	Asp
1				5					10					15	

Glu	Asn	Ser	Gln
			20

<210> 81

<211> 14

<212> PRT

<213> Homo sapiens

<400> 81

Phe	Thr	Asp	Ser	Lys	Leu	Tyr	Ile	Pro	Leu	Glu	Tyr	Arg	Ser
1				5					10				

<210> 82

<211> 13

<212> PRT

<213> Homo sapiens

<400> 82

Phe	Asp	Ile	Lys	Leu	Leu	Arg	Asn	Ile	Pro	Arg	Trp	Thr
1				5					10			

<210> 83

<211> 15

<212> PRT

<213> Homo sapiens

<400> 83

Gly	Val	Ala	Gly	Gln	Asp	Tyr	Trp	Ala	Val	Leu	Ser	Gly	Lys	Gly
1			5					10					15	

<210> 84

<211> 10

<212> PRT

<213> Homo sapiens

<400> 84

Ser	Arg	Glu	Val	Thr	Thr	Asn	Ala	Gln	Arg
1			5					10	

<210> 85

<211> 216

<212> DNA

<213> Homo sapiens

<400> 85

tgctcttact ccaaaaagat ggacccaggg ccctgcgggc ctccccctgg ccatggccca	60
ggtcacccac cccctgggtcc acatcactga ggaagtagaa gaaaacagga cacaagatgg	120
caagcctgag agaattgccc agctgacctg gaaggaggcc taaaccgcaa tattctcttc	180
ctaataaaca gcctcctaga ggccacattc tattct	216

<210> 86

<211> 227

<212> DNA

<213> Homo sapiens

<400> 86

tgctcttact ccaaaaagat ggacccaggt ccgaaggggc actgccactg tgggggggcat	60
ggccatcctc caggtcaccc accccctggt ccacatcact gaggaagtag aagaaaacag	120
gacacaagat ggcaagcctg agagaattgc ccagctgacc tggaatgagg cctaaaccac	180

aatctttctct tcctaataaa cagcctccta gagggccacat tctattc

227

<210> 87

<211> 261

<212> DNA

<213> Homo sapiens

<400> 87

tgctcttact ccaaaaagat ggacccaggt ccgaaggggc actgccactg tggggggcat 60
ggccatcctc caggtcactg cgggcctccc cctggccatg gcccagggtca cccaccccct 120
gggtccacatc actgaggaag tagaagaaaa caggacacaa gatggcaagc ctgagagaat 180
tgcccagctg acctggaatg aggcctaaac cacaatcttc tcttcctaataaacagcctc 240
ctagaggcca cattctattc t 261

<210> 88

<211> 327

<212> DNA

<213> Homo sapiens

<400> 88

tgctcttact ccaaaaagat ggacccaggt ccgaaggggc actgccactg tggggggcat 60
ggccatcctc caggtcactg cgggccaccc ccccaccatg gtccagggcc ctgcgggcca 120
cccccccacc atggtccagg gccctgcggg cctccccctg gccatggccc aggtcaccca 180
ccccctggtc cacatcactg aggaagtaga agaaaacagg acacaagatg gcaagcctga 240
gagaattgcc cagctgacct ggaatgaggc ctaaaccaca atcttctctt cctaataaac 300
agcctcctag aggccacatt ctattct 327

<210> 89

<211> 31

<212> PRT

<213> Homo sapiens

<400> 89

Leu Leu Leu Gln Lys Asp Gly Pro Arg Ala Leu Arg Ala Ser Pro Trp
1 5 10 15

Pro Trp Pro Arg Ser Pro Thr Pro Trp Ser Thr Ser Leu Arg Lys
20 25 30

<210> 90

<211> 23

<212> PRT

<213> Homo sapiens

<400> 90

Met Asp Pro Gly Pro Cys Gly Pro Pro Pro Gly His Gly Pro Gly His
1 5 10 15

Pro Pro Pro Gly Pro His His
20

<210> 91

<211> 36

<212> PRT

<213> Homo sapiens

<400> 91

Met Ala Gln Val Thr His Pro Leu Val His Ile Thr Glu Glu Val Glu
1 5 10 15

Glu Asn Arg Thr Gln Asp Gly Lys Pro Glu Arg Ile Ala Gln Leu Thr
20 25 30

Trp Lys Glu Ala
35

<210> 92

<211> 34

<212> PRT

<213> Homo sapiens

<400> 92

Leu Leu Gln Lys Asp Gly Pro Arg Ser Glu Gly Ala Leu Pro Leu Trp
1 5 10 15

Gly Ala Trp Pro Ser Ser Arg Ser Pro Thr Pro Trp Ser Thr Ser Leu
20 25 30

Arg Lys

<210> 93

<211> 27

<212> PRT

<213> Homo sapiens

<400> 93

Met Asp Pro Gly Pro Lys Gly His Cys His Cys Gly Gly His Gly His
1 5 10 15

Pro Pro Gly His Pro Pro Pro Gly Pro His His
20 25

<210> 94

<211> 38

<212> PRT

<213> Homo sapiens

<400> 94

Met Ala Ile Leu Gln Val Thr His Pro Leu Val His Ile Thr Glu Glu
1 5 10 15

Val Glu Glu Asn Arg Thr Gln Asp Gly Lys Pro Glu Arg Ile Ala Gln
20 25 30

Leu Thr Trp Asn Glu Ala
35

<210> 95

<211> 46

<212> PRT

<213> Homo sapiens

<400> 95

Leu Leu Leu Gln Lys Asp Gly Pro Arg Ser Glu Gly Ala Leu Pro Leu
1 5 10 15

Trp Gly Ala Trp Pro Ser Ser Arg Ser Leu Arg Ala Ser Pro Trp Pro
20 25 30

Trp Pro Arg Ser Pro Thr Pro Trp Ser Thr Ser Leu Arg Lys
 35 40 45

<210> 96

<211> 38

<212> PRT

<213> Homo sapiens

<400> 96

Met Asp Pro Gly Pro Lys Gly His Cys His Cys Gly Gly His Gly His
 1 5 10 15

Pro Pro Gly His Cys Gly Pro Pro Pro Gly His Gly Pro Gly His Pro
 20 25 30

Pro Pro Gly Pro His His
 35

<210> 97

<211> 49

<212> PRT

<213> Homo sapiens

<400> 97

Met Ala Ile Leu Gln Val Thr Ala Gly Leu Pro Leu Ala Met Ala Gln
 1 5 10 15

Val Thr His Pro Leu Val His Ile Thr Glu Glu Val Glu Glu Asn Arg
 20 25 30

Thr Gln Asp Gly Lys Pro Glu Arg Ile Ala Gln Leu Thr Trp Asn Glu
 35 40 45

Ala

<210> 98

<211> 68

<212> PRT

<213> Homo sapiens

<400> 98

342-3PCT.ST25.txt

Leu Leu Leu Gln Lys Asp Gly Pro Arg Ser Glu Gly Ala Leu Pro Leu
1 5 10 15

Trp Gly Ala Trp Pro Ser Ser Arg Ser Leu Arg Ala Thr Pro Pro Pro
20 25 30

Trp Ser Arg Ala Leu Arg Ala Thr Pro Pro Pro Trp Ser Arg Ala Leu
35 40 45

Arg Ala Ser Pro Trp Pro Trp Pro Arg Ser Pro Thr Pro Trp Ser Thr
50 55 60

Ser Leu Arg Lys
65

<210> 99

<211> 60

<212> PRT

<213> Homo sapiens

<400> 99

Met Asp Pro Gly Pro Lys Gly His Cys His Cys Gly Gly His Gly His
1 5 10 15

Pro Pro Gly His Cys Gly Pro Pro Pro His His Gly Pro Gly Pro Cys
20 25 30

Gly Pro Pro Pro His His Gly Pro Gly Pro Cys Gly Pro Pro Pro Gly
35 40 45

His Gly Pro Gly His Pro Pro Pro Gly Pro His His
50 55 60

<210> 100

<211> 71

<212> PRT

<213> Homo sapiens

<400> 100

Met Ala Ile Leu Gln Val Thr Ala Gly His Pro Pro Thr Met Val Gln
1 5 10 15

Gly Pro Ala Gly His Pro Pro Thr Met Val Gln Gly Pro Ala Gly Leu
20 25 30

342-3PCT.ST25.txt

Pro Leu Ala Met Ala Gln Val Thr His Pro Leu Val His Ile Thr Glu
35 40 45

Glu Val Glu Glu Asn Arg Thr Gln Asp Gly Lys Pro Glu Arg Ile Ala
50 55 60

Gln Leu Thr Trp Asn Glu Ala
65 70